Lady Kenmore

MODEL

89

AUTOMATIC ZIG-ZAG SEWING MACHINE

Sears, Roebuck and Co.

Dear Homemaker:

This booklet has been written for you, to help you use and enjoy fully your KENMORE Automatic Zigzag Sewing Machine.

We urge you to read pp. 2-18 before using your machine. This section explains the operation of the special controls that allow you to do many tedious tasks automatically. The following pages offer suggestions and instructions for specific ornamental and time saving operations. See p. 11 before using the automatic patterns or zigzag stitch.

We feel the KENMORE Automatic Zigzag Sewing Machine is the finest of its kind and we are happy to offer help with any questions you may have regarding the machine.

Sincerely,

Jean Shaw

Jean Shaw, Director
Home Economics Laboratory
Department 817
Sears, Roebuck and Co.
Chicago 7, Illinois

Fusion # 3
9 lines
7

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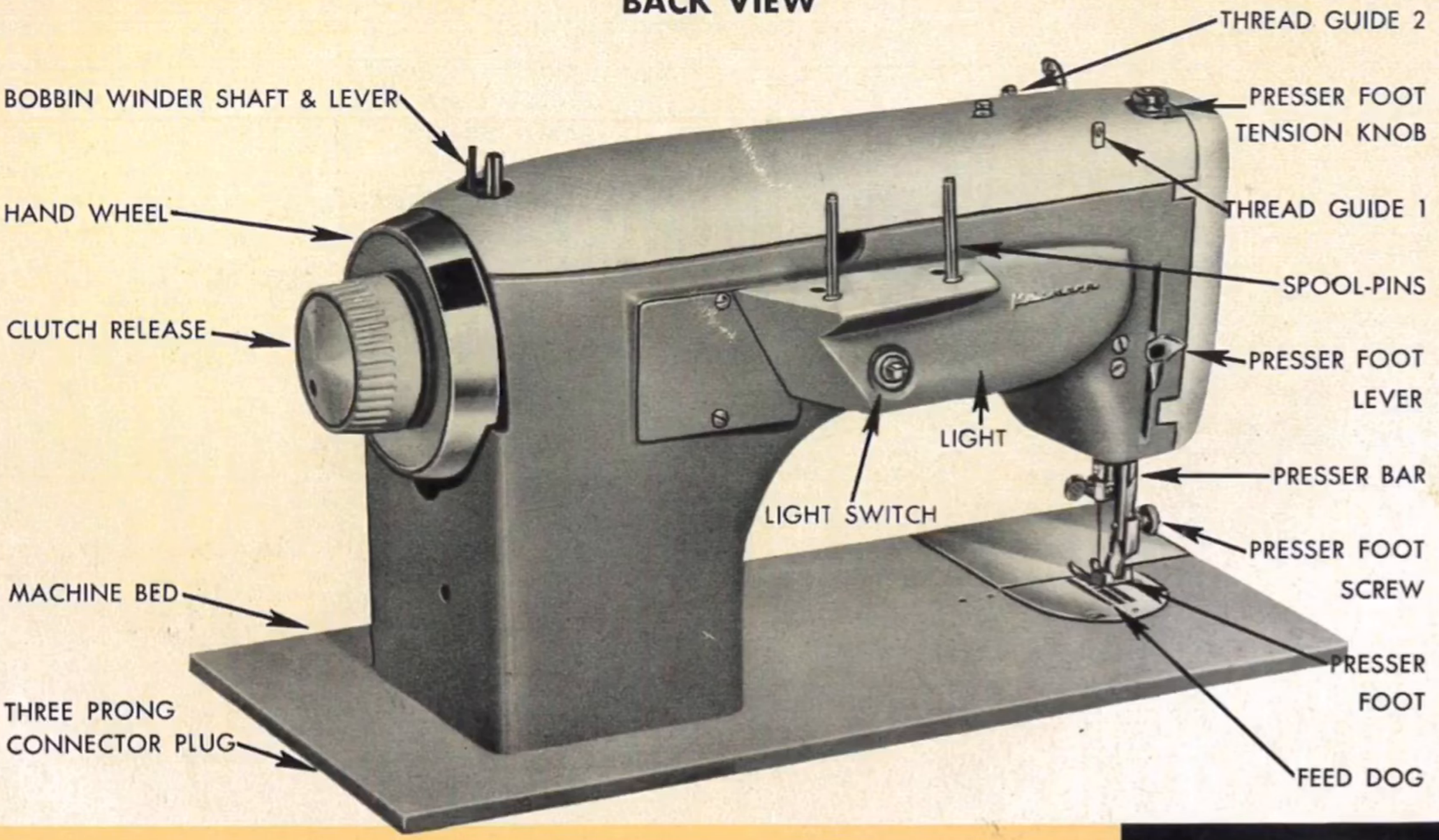
BACK VIEW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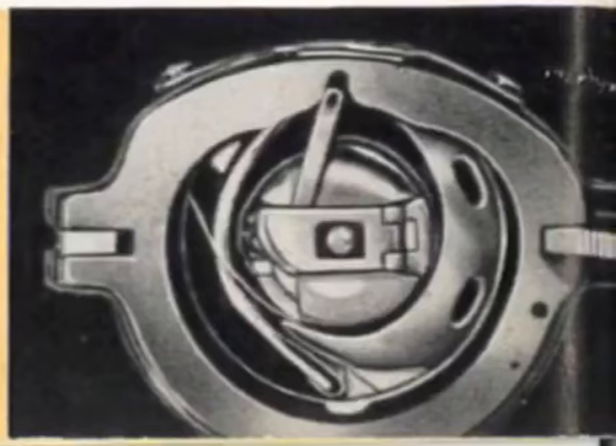
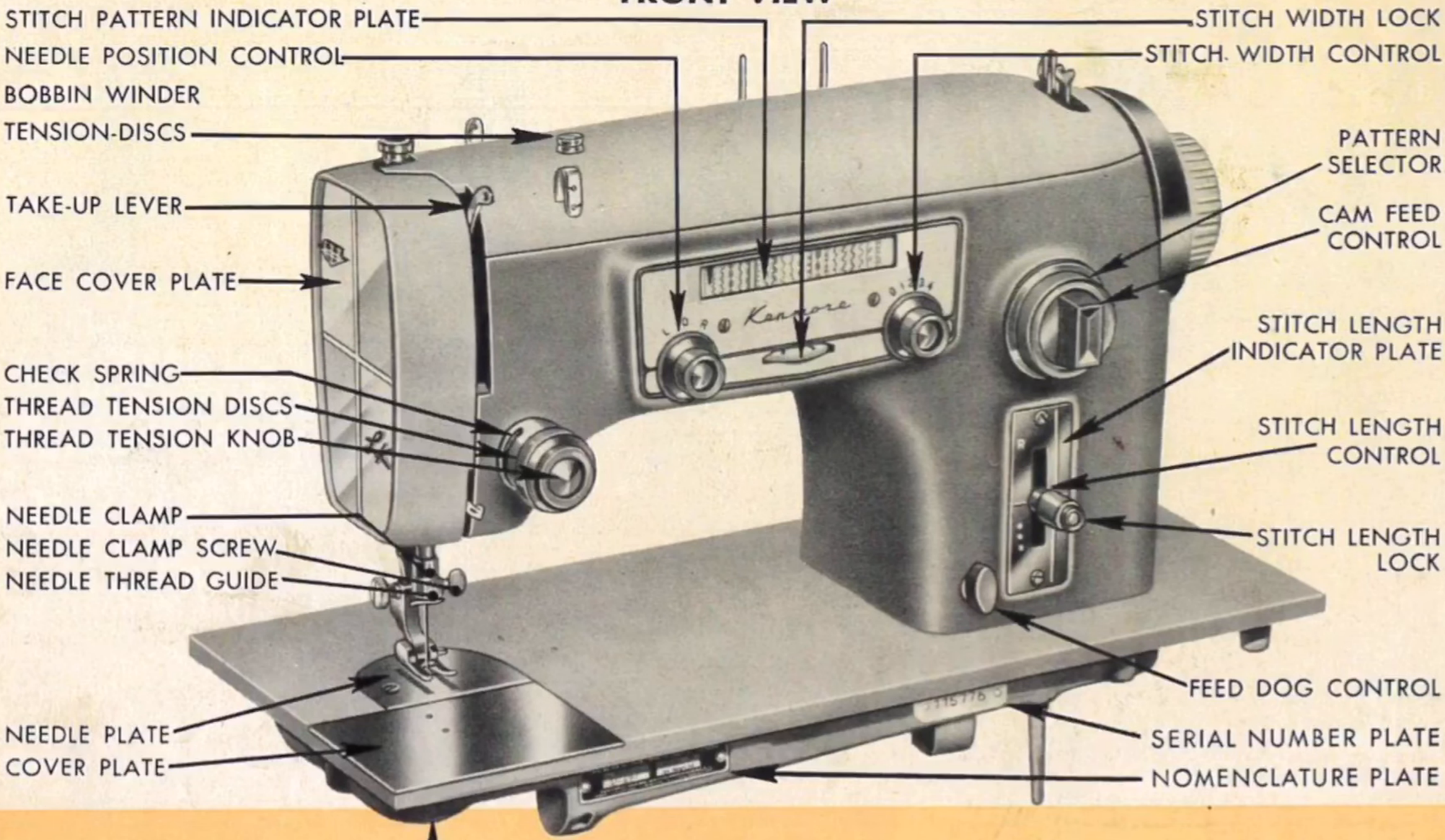
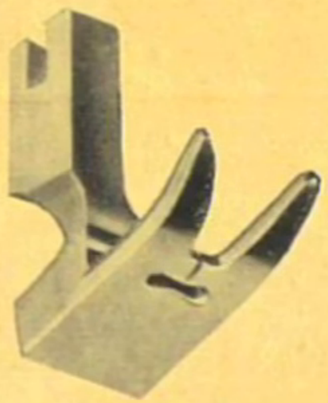
BOBBIN WINDER SHAFT & LEVER
PRESSER FOOT TENSION KNOB
HAND WHEEL
THREAD GUIDE 1
SPOOL-PINS
CLUTCH RELEASE
PRESSER FOOT LEVER
LIGHT
PRESSER BAR
LIGHT SWITCH
PRESSER FOOT SCREW
MACHINE BED
PRESSER FOOT
THREE PRONG CONNECTOR PLUG
FEED DOG



FRONT VIEW


STITCH PATTERN INDICATOR PLATE
NEEDLE POSITION CONTROL
BOBBIN WINDER
TENSION-DISCS
TAKE-UP LEVER
FACE COVER PLATE
CHECK SPRING
THREAD TENSION DISCS
THREAD TENSION KNOB
NEEDLE CLAMP
NEEDLE CLAMP SCREW
NEEDLE THREAD GUIDE
NEEDLE PLATE
COVER PLATE
BOBBIN CASE
STITCH WIDTH LOCK
STITCH WIDTH CONTROL
PATTERN SELECTOR
CAM FEED CONTROL
STITCH LENGTH INDICATOR PLATE
STITCH LENGTH CONTROL
STITCH LENGTH LOCK
FEED DOG CONTROL
SERIAL NUMBER PLATE
NOMENCLATURE PLATE



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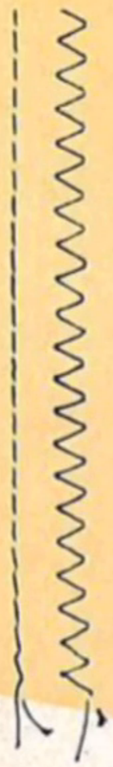
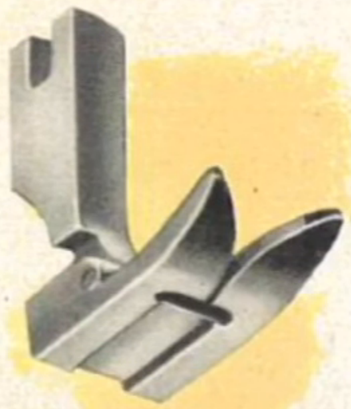
STANDARD FOOT

used for most straight and zigzag stitching.





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SATIN STITCH FOOT

used for zigzag stitching when stitch length control is near 0.

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APPLIQUE FOOT

used for most techniques with a filler thread.

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BUTTONHOLE FOOT

used for buttonholes, plain and with a filler thread (foot clear plastic).

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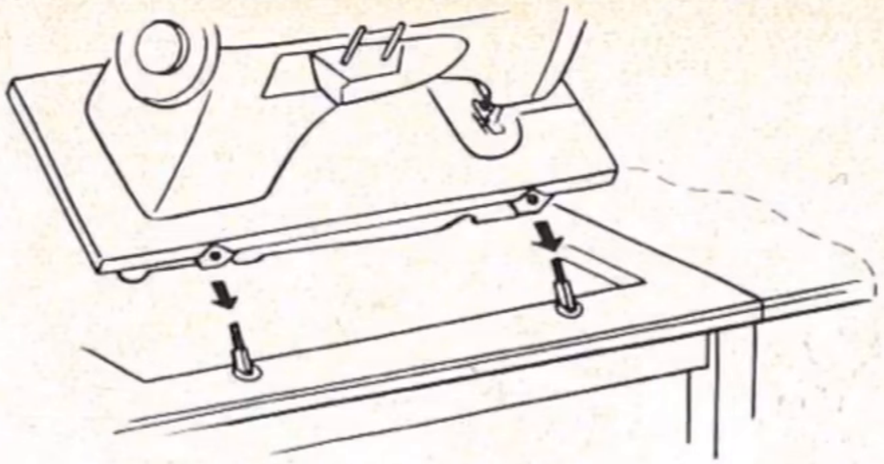
BUTTON FOOT

used to sew buttons.

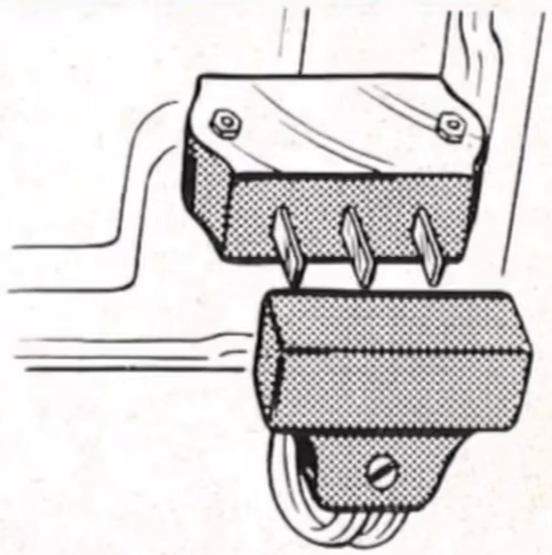


INSTALLING MACHINE HEAD

1 Loosen the two hinge screws under holes in the rear edge of the machine bed.

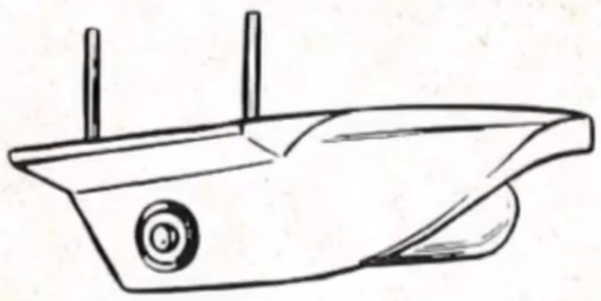
2 Raise hinge pins in the cabinet cutout. Slip machine head onto the pins and tighten hinge screws securely.

3 Lower machine head to front cabinet flap.



CONNECTING MACHINE

Tilt back sewing head as the connector is in the right-hand corner on the under side of the bed plate. Push the plug onto the 3-prong connector. Plug machine cord into any 110-120 volt outlet.



MACHINE LIGHT

Light bulb is located under spool pins on the rear of machine arm. It may be turned on or off by pushing the button switch on the light shade.

To remove bulb, stand at rear of the machine. Twist bulb toward you and pull from socket. To replace, push it into socket and twist away from you.

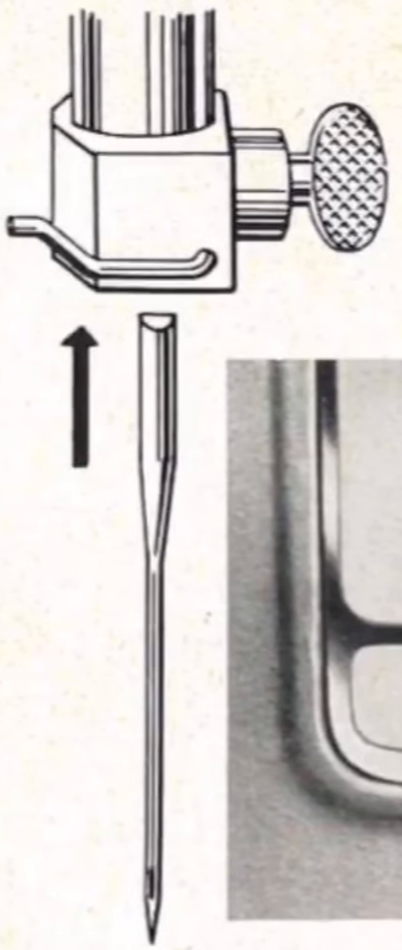
Needle and Thread

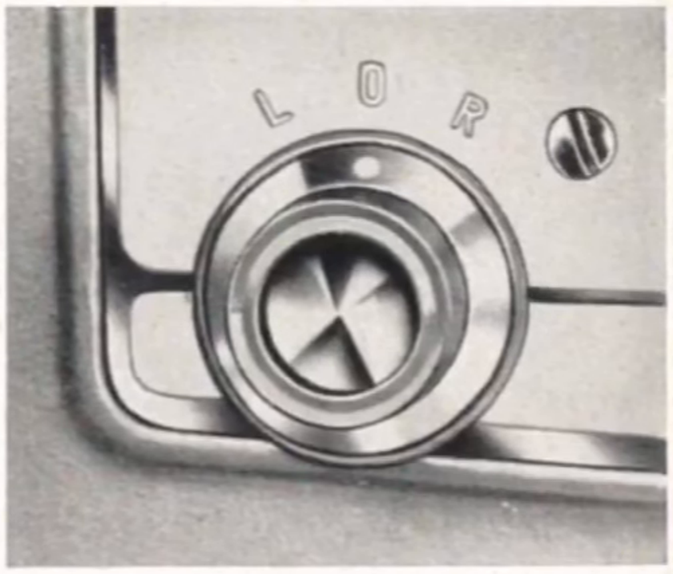
SETTING THE NEEDLE—Refer to Chart, p. 7, when choosing the correct needle for the stitching to be done.

1 Turn the hand wheel toward you until the take-up lever is at its highest point.

2 Hold the needle with flat side away from you.

3 Slip the needle as far as it will go into the needle clamp, and tighten the thumb screw.





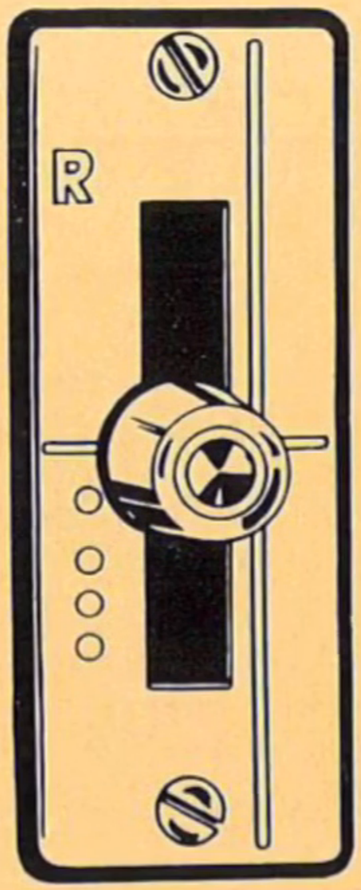
SETTING NEEDLE POSITION—The needle bar should be at its highest point when adjusting needle position to avoid twisting or tearing the fabric. Set the needle position control to right, center or left for corresponding needle positions. When using a right or left needle position, check to see that needle enters the needle hole without touching the presser foot at both extremes of the zigzag stitch.

USE ONLY CENTER POSITION WITH DOUBLE NEEDLE. SEE PAGE 32

THREAD SELECTION

Use only top quality mercerized cotton, silk, nylon, or machine embroidery thread on your KENMORE. MERCERIZED MACHINE EMBROIDERY THREAD makes a much finer decorative stitch than mercerized sewing thread.

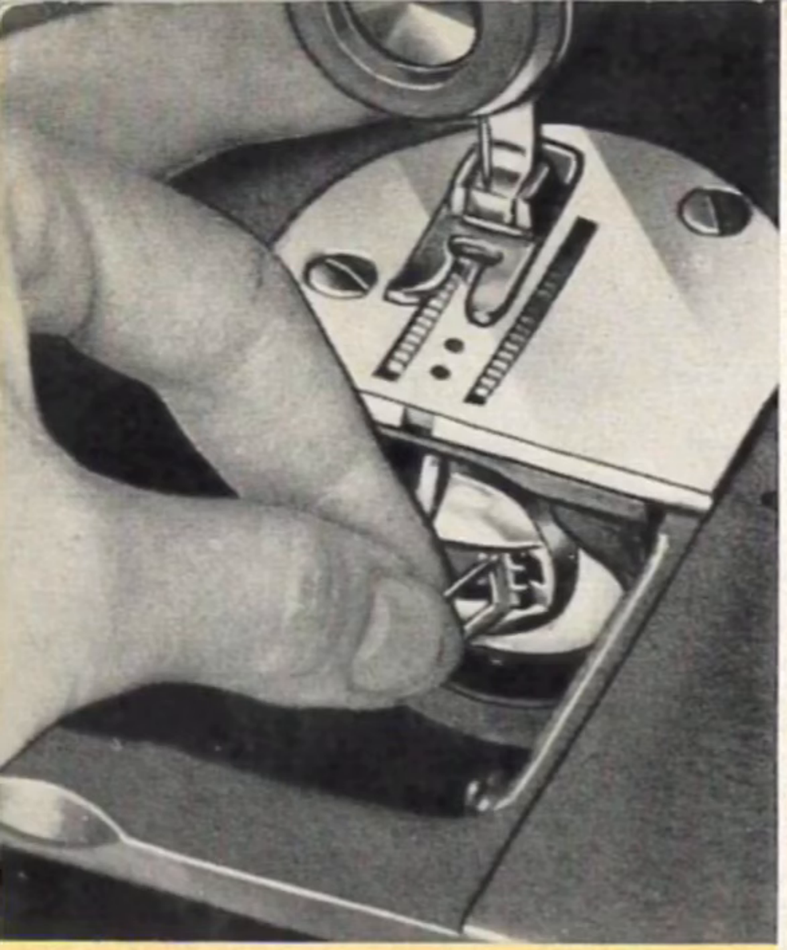
The size of thread you use depends on the fabric to be sewn. See the NEEDLE AND THREAD CHART, p. 7, for thread size to use for different weight fabrics.



Needle and Thread Table

THREAD SIZE	NEEDLE SIZE Former *)	NEEDLE SIZE New	GERMAN NEEDLE SIZE	STRAIGHT STITCH LENGTH	FABRIC
Cotton 80–100 Nylon A Silk A Machine embroidery	0	11	70	1 – 1½	Sheer cottons, silks, and nylons Fine laces
Cotton 60–80 Mercerized 50 Nylon A Silk A Machine embroidery	1	14	80	1½ – 2	Light to medium weight cottons Light to medium weight silks Medium weight nylons Light weight woolens
Cotton 40–60 Mercerized 50 Mercerized heavy duty	2	16	90	2 – 3	Heavy weight cottons Medium to heavy weight woolens Heavy drapery fabrics
Cotton 30–50 Mercerized heavy duty	3	18	100	3 – 4	Heaviest cottons as for men's work clothes Heaviest woolen coating

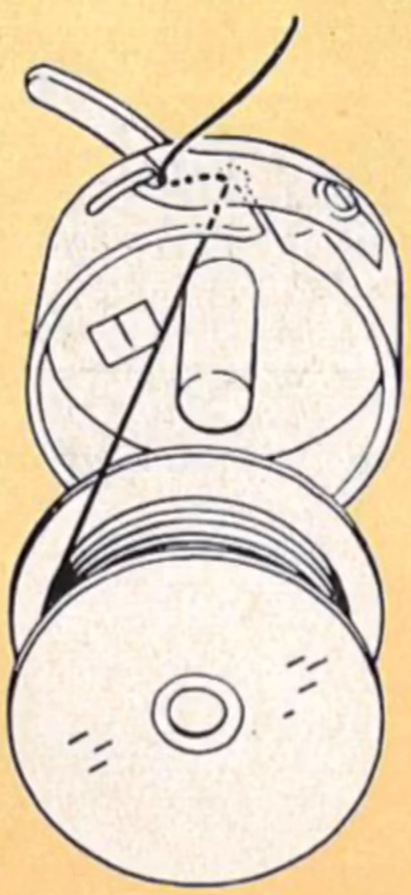
*) **NOTE:** To buy additional needles at your nearest Sears and Simpsons-Sears retail or mail order store, specify part no. 6021.



REMOVING AND REPLACING THE BOBBIN CASE

Raise needle to its highest point by turning hand wheel toward you. Remove hand hole cover plate. Grasp bobbin case latch as illustrated and lift case and bobbin out. Release latch and bobbin may be removed.

To replace bobbin case, reverse this process. Hold bobbin case by the latch, with thread coming from the top, and slip case onto center pin until it *snaps* into position.



THREADING THE BOBBIN CASE

1 Hold bobbin case with open side toward you.

2 Slip bobbin into case with thread coming from left to right over top of bobbin.

3 Draw bobbin thread into the slot, under the tension spring and out through the small hole in the case, as illustrated.

4 Allow 4 inches of thread to hang free.

Winding the Bobbin

1 Hold the hand wheel with your left hand and turn the clutch release toward you with your right hand.

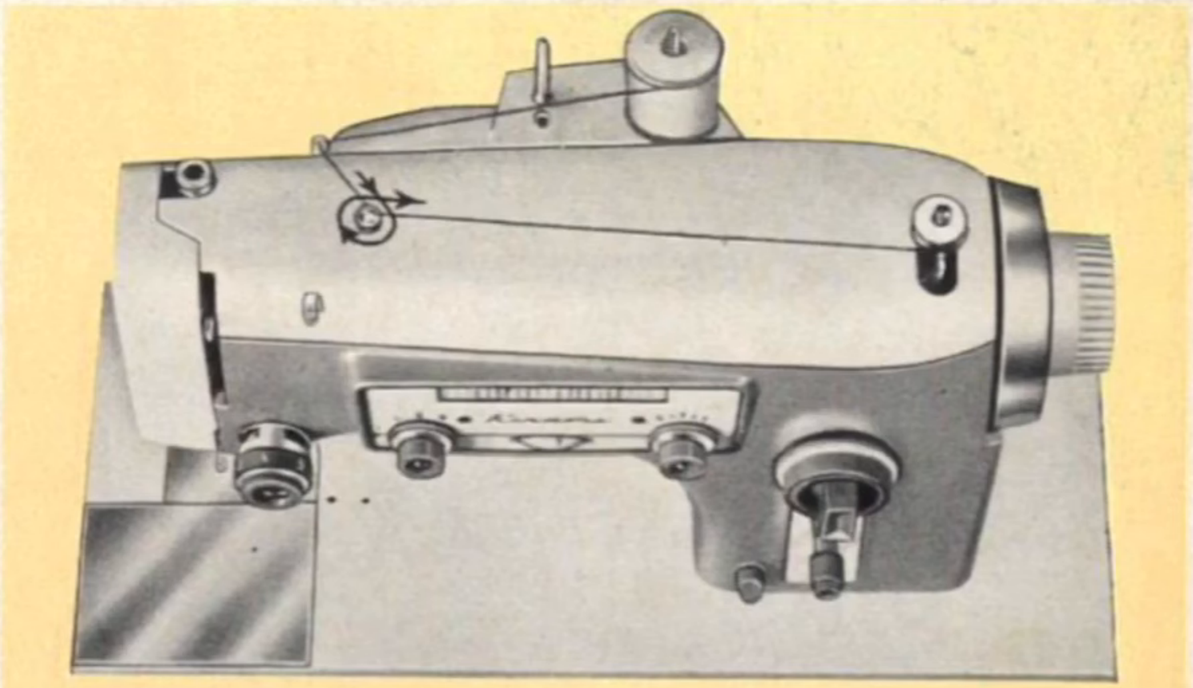
2 Slip the bobbin on the bobbin winder shaft.

3 Pass the thread from the spool through the guide and then **once clockwise around the thread tension discs** and along to the winder. Wind the thread a few times around the bobbin.

4 Engage the winder action by pressing the latch and set the hand wheel in motion. The winding action will stop automatically as the bobbin is full.

5 Cut the thread and remove bobbin from the shaft.

6 Tighten clutch release by holding hand wheel with the left hand and turning knob away from you.



Upper Threading

To thread the upper part of your machine, presser foot must be up, take-up lever at its highest point, and thread on either spool pin.

1 Draw thread from back to front through slot in guide 1.

2 Bring thread forward on the right of thread guide 2. Slip thread under guide into upper slot from left side and into lower slot from right.

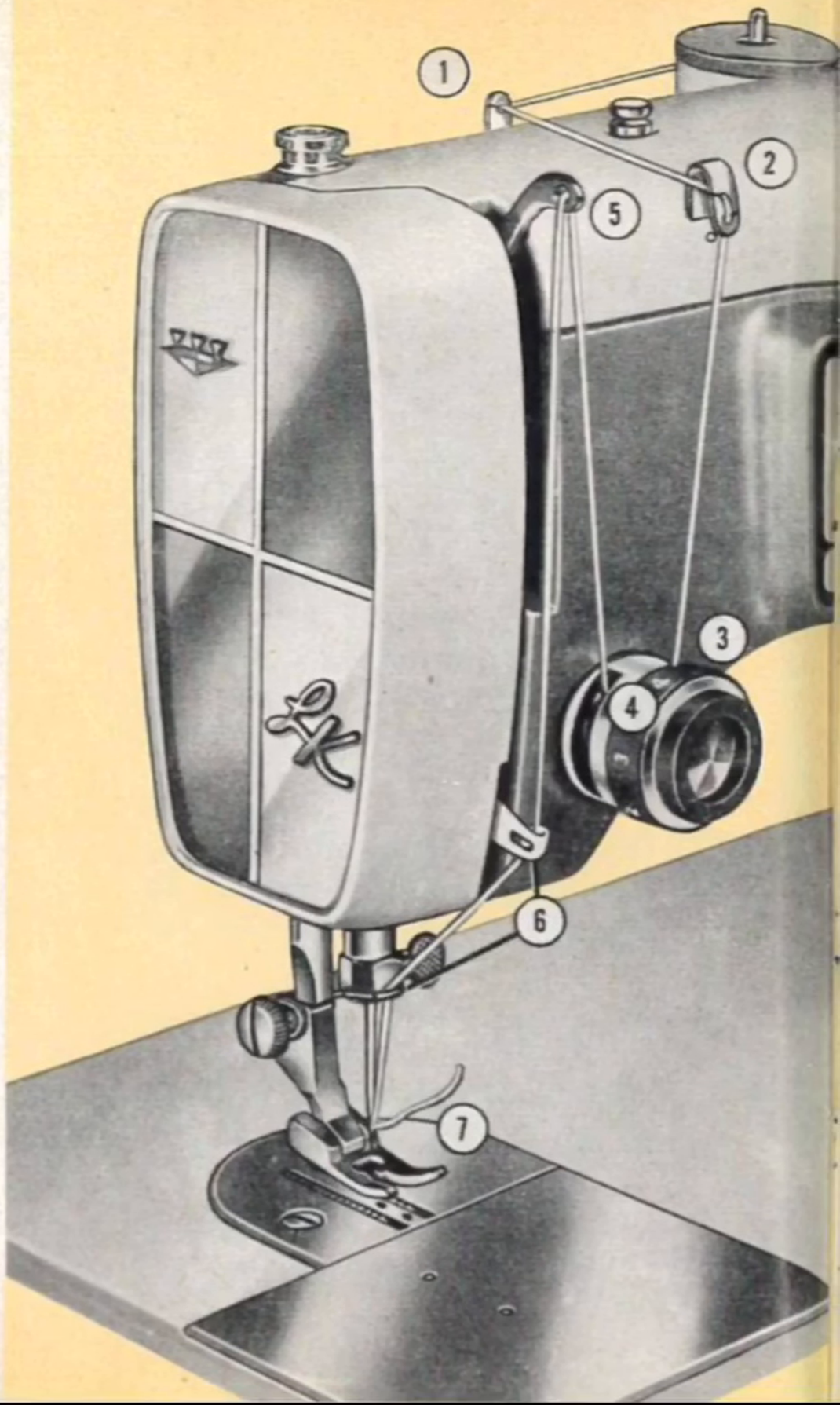
3 Pass thread from right to left under tension mechanism. Place thread either in front or in back of the center tension disc.

4 Pull thread against tension spring.

5 Thread from right to left through hole in take-up lever.

6 Draw thread through lower thread guide and down behind guide on needle clamp.

7 Thread needle from front to back. Pull several inches of thread through needle.



Remember

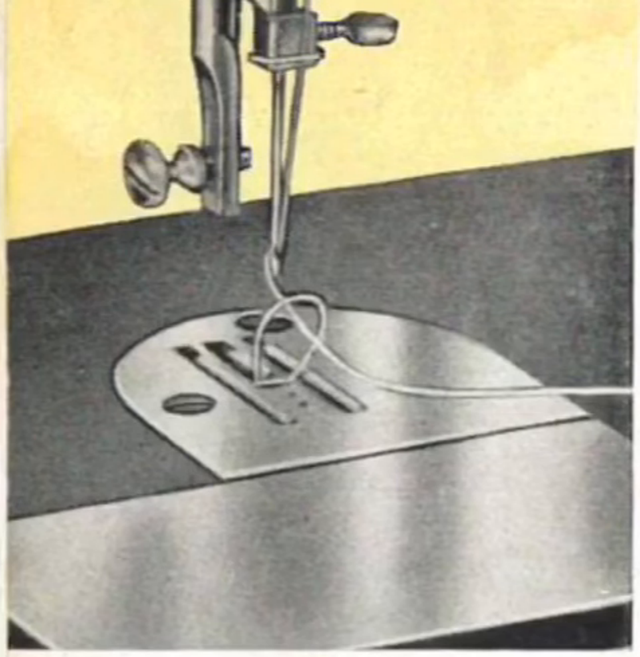
TO CHECK THE FOLLOWING CONTROLS:

STRAIGHT STITCHING

1. Needle position control – usually center 6
2. Stitch pattern indicator plate – straight stitching 12
3. Stitch width control-0 14
4. Stitch width lock-0 14
5. Stitch length control – as recommended on chart, page 7 . . 13

ZIG-ZAG STITCHING

1. Needle position control – usually center 6
2. Stitch pattern indicator plate – zigzag stitching 12
3. Stitch width control – at selected width 14
4. Stitch width lock – same number as stitch width control . . 14
5. Stitch length control – varies with operation 13



PICKING UP BOBBIN THREAD

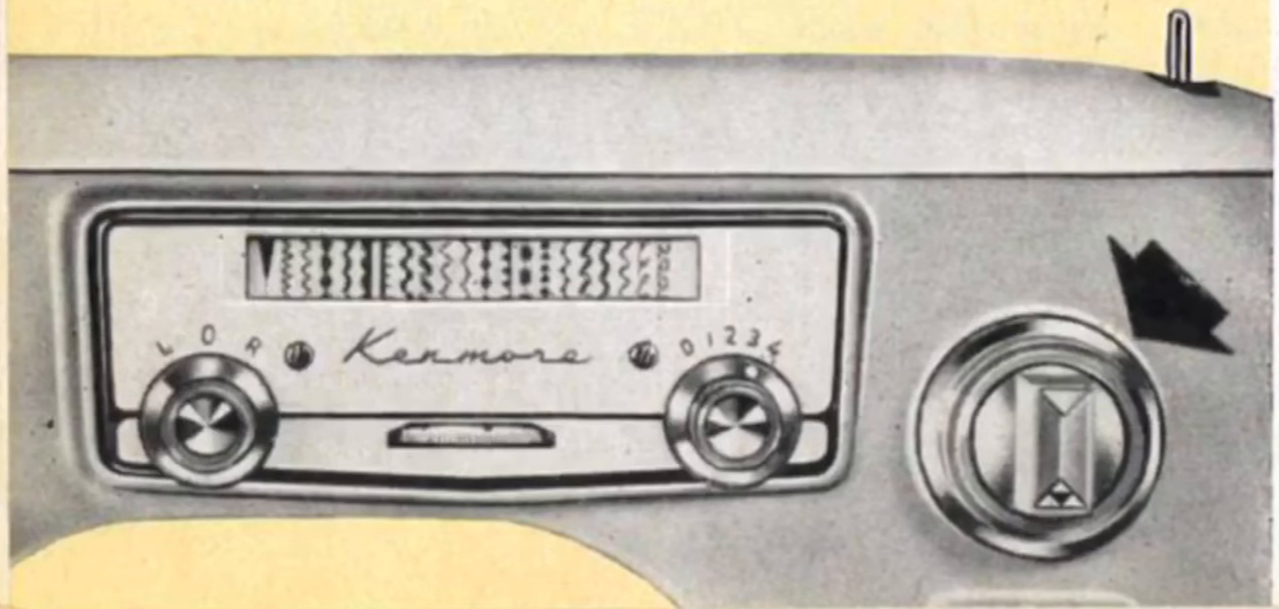
1. Set stitch width control on 0 and hold end of needle thread loosely in left hand. Turn hand wheel toward you so needle enters the needle plate hole and returns to its highest point.
2. Draw bobbin thread loop through needle plate, by pulling up on needle thread.
3. Place both threads back under presser foot.

TURNING A CORNER

Stop machine with needle still in fabric. Raise presser foot. Turn fabric to desired direction. Lower presser foot and continue stitching.

REMOVING FABRIC

When you finish stitching, turn hand wheel toward you until take-up lever reaches its highest point. THIS IS IMPORTANT. Raise presser foot and draw fabric away from you. Cut thread on rear edge of presser bar.



PATTERN SELECTOR

To sew with the straight stitch, press the knob and rotate it until the pointer indicates the stitch and then release.

The pointer MUST have this position when sewing with the straight stitch.

SETTING STITCH LENGTH

Move stitch length control lever to the desired position between the center line and the bottom of the lower half of the stitch length indicator plate. With the stitch length indicator on the bottom, the machine sews the longest stitch. The size stitch you select will depend on the fabric you are sewing. See chart on Page 7. Recommended stitch lengths are given in numbers which refer to the markings between the center line and the bottom as illustrated here. Tighten stitch length lock so that forward and reverse stitches will be the same setting.

The line indicates zero. The last dot will give you approximately 8 stitches to the inch. As the lever moves up, the size of the stitch decreases and the number of the stitches per inch increases.

REVERSE STITCHING

Move lever up until it stops. Move lever down to original position for forward stitching.

It is best to begin and end most seams with reverse stitching, often called back tacking.

FASTENING A SEAM

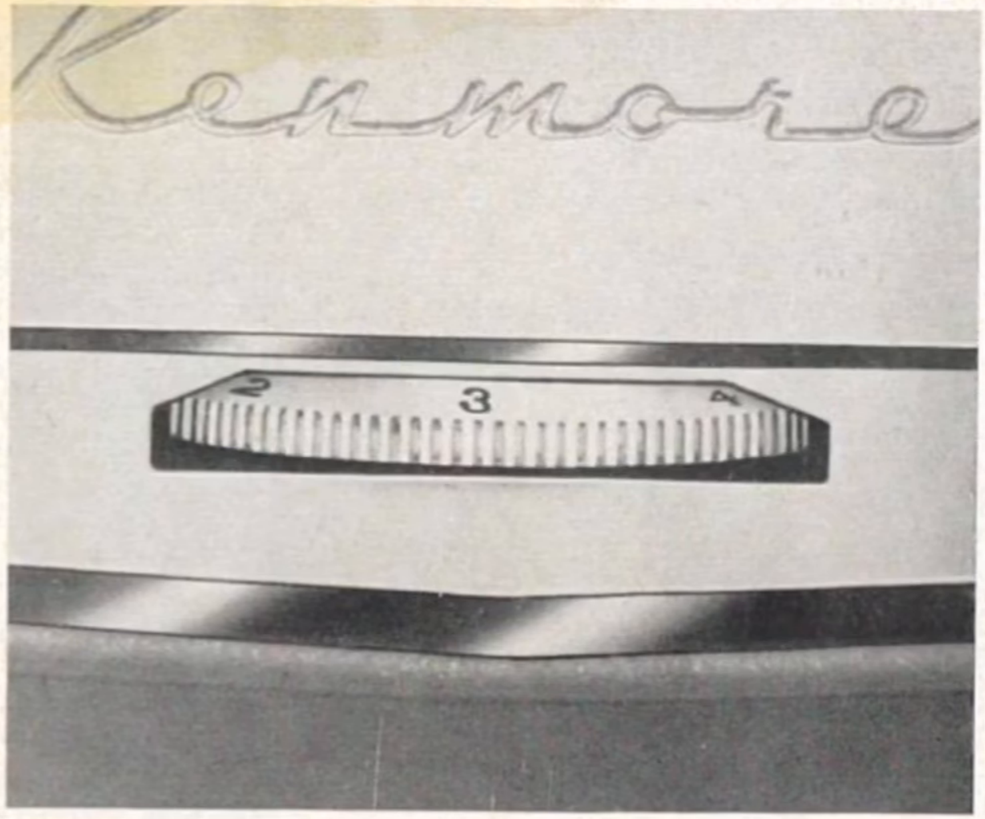
Be sure both threads are drawn back under the presser foot. Lower needle into fabric about ½ inch from beginning of seam. Push stitch length regulator up for reverse stitching. Stitch in reverse until needle reaches beginning of seam.

Move stitch length regulator down for forward stitching and complete seam. When you reach the end, raise the stitch length regulator and sew back over ½ inch of completed seam.

BASTING

Set the stitch length regulator for the longest possible stitch. Basting is easily removed by pulling one thread.

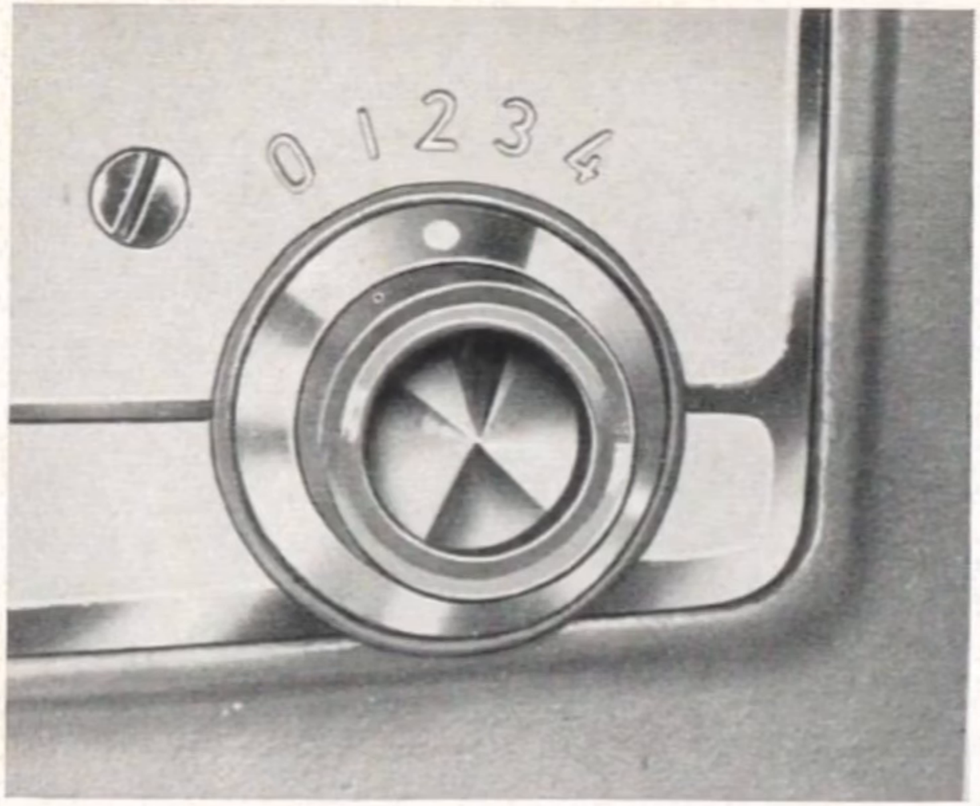
If you prefer to use pins for basting, your KENMORE will sew over the pins. Be sure to keep the pins at right angles to the seam and the head of the pin away from the presser foot.



LOCKING STITCH WIDTH

The stitch width lock has six positions—0, 1, 2, 3, 4, and buttonholes. Turn the lock to the desired stitch width setting. This limits the maximum width so that the regulator may only be moved between 0 and the number selected.

Buttonhole setting locks the stitch width at 4 and provides a partial stop at 2.

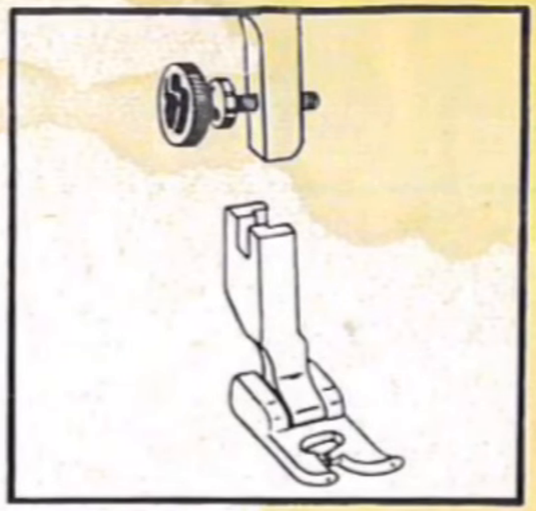


SETTING STITCH WIDTH

Move stitch width control to the desired position between 0 and 4 on the stitch width indicator plate. Zigzag stitch width increases from 1 to 4 Straight stitching is possible only with control on 0.

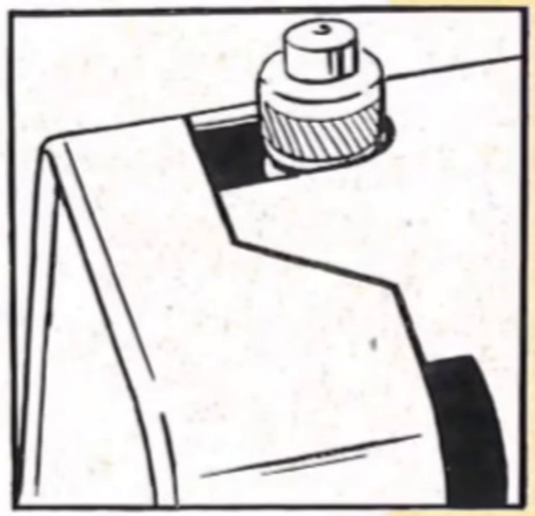
CHANGING THE PRESSER FOOT

Loosen presser foot screw with the large screw driver. Slip presser foot to the left and forward until it is free. Reverse procedure to replace presser foot. Tighten screw with the screw driver.



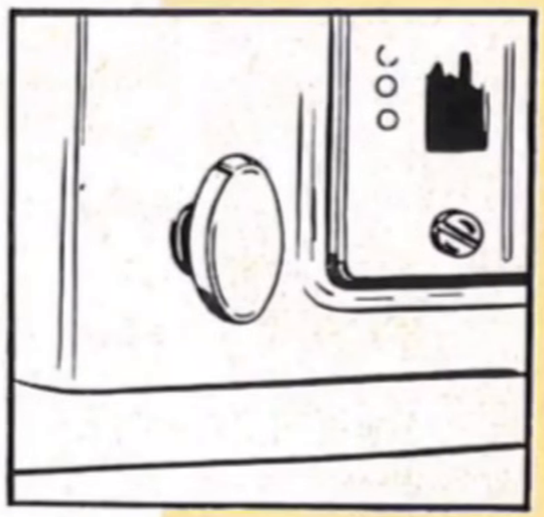
CHANGING PRESSURE ON PRESSER FOOT

It is rarely necessary to change the pressure on the presser foot. For those operations that require it, push down on inner pin of presser foot pressure regulator to the desired pressure. To release pressure, press down on outer ring. There should be just enough pressure on the foot to allow the fabric to move along easy, and to prevent it from racing with the needle. If one or both plies of fabric ripple, increase the foot pressure. If foot marks the fabric, decrease the foot pressure.



DROPPING THE FEED DOG

To lower the feed dog, press the feed knob and turn it to the right.



ADJUSTING TENSIONS

A perfect stitch will have threads locked between the two layers of fabric with no loops on top or bottom.

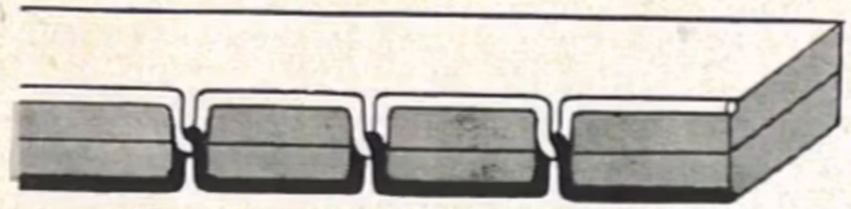
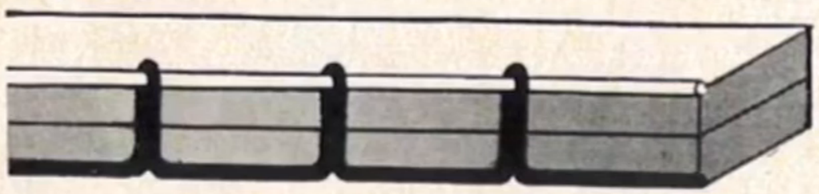
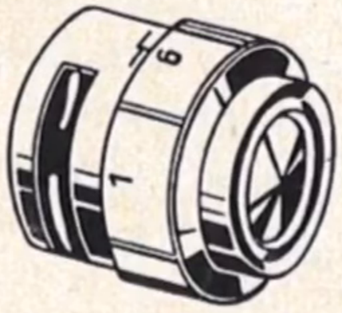
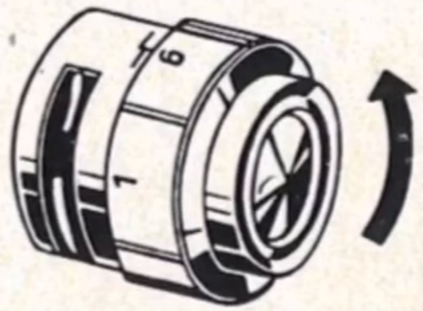
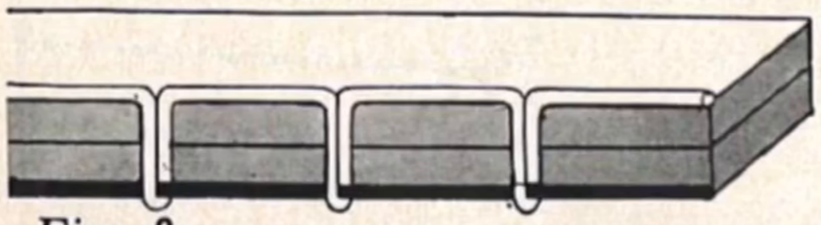
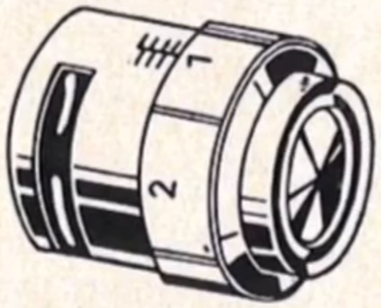
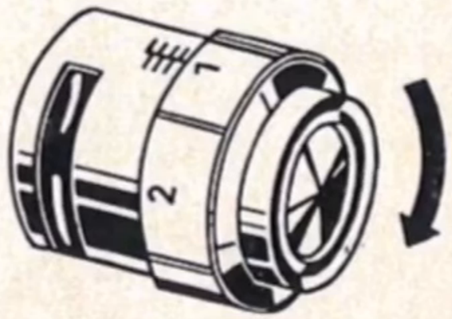


Fig. 1

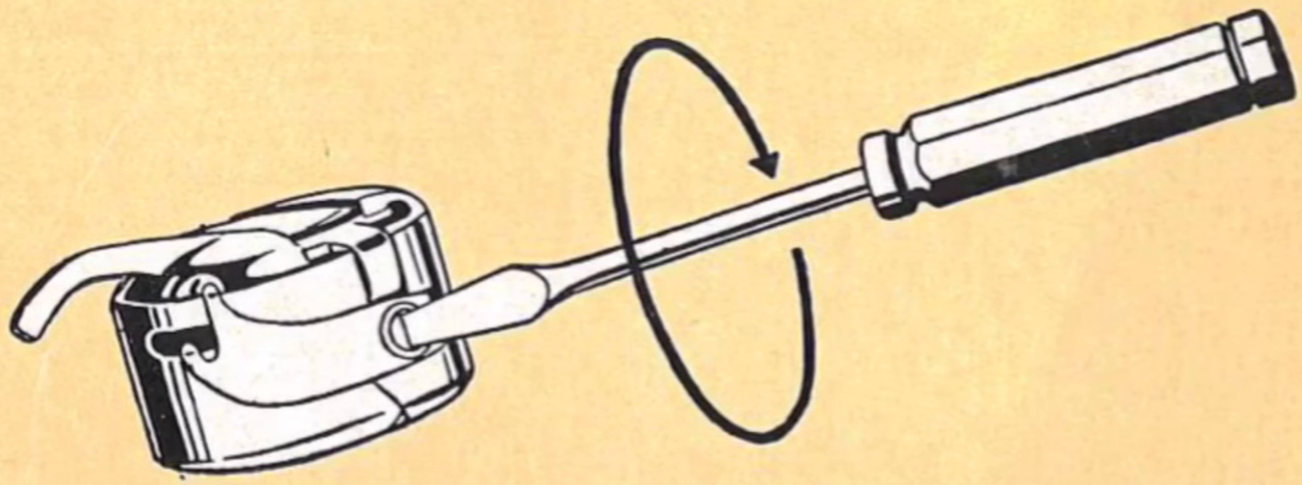
PROBLEM	REMEDY
Upper thread too tight  Fig. 2	 Decrease Tension 
Upper thread too loose  Fig. 3	 Increase Tension 

When stitching is unsatisfactory as in figures 2 and 3, adjust the upper thread tension. Lower thread tension is preset and rarely requires adjustment for general sewing.

However, if stitch is satisfactory, as in figure 1 and seam is badly puckered, the cause may be tight tensions and both upper and lower may be adjusted.

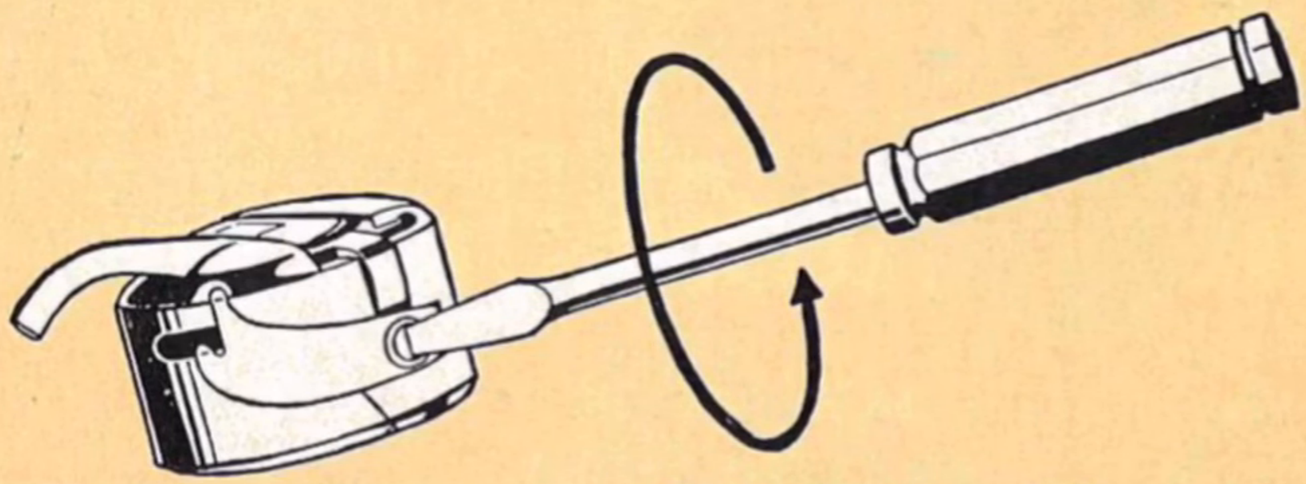
When adjusting the tension on the bobbin case, make slight adjustments with a screwdriver.

INCREASE TENSION



Turn Clockwise

DECREASE TENSION



Turn Counter Clockwise

Synthetics

Your KENMORE will sew all the new fabrics of synthetic fibers, such as nylon, *Orlon, **Dacron, rayon, acetate, blends of these, and combinations of synthetic and natural fibers. When stitching a fabric of blended or combined fibers, handle it as you would a material of the fiber present in the largest percentage. For example, a fabric woven of 60% Orlon and 40% silk should be handled as one made entirely of Orlon.

When stitching a fabric that is over 50% synthetic fiber, remember:

a Select patterns of the loose fitting type with cap or kimono sleeves, because most synthetic fiber fabrics cannot be eased with steam pressing, and are not absorbent.

b Use a synthetic thread.

c Use a fine needle as recommended in chart on page 7.

d Wind the bobbin in the usual way, but do not pass thread between tension discs. Guide thread by hand for a smoothly wound bobbin.

e Set the stitch length as recommended for a similar weight cotton (page 7). Also, try some longer and shorter stitches. Choose the stitch length that gives the most satisfactory seam.

f Check thread tensions by sewing on a double thickness of the fabric to be used. Usually the upper thread tension must be loosened. Sometimes both bobbin and upper thread tension must be loosened. (page 16)

SEWING ON PLASTIC FILMS

Set the machine with normal thread tensions and a large size stitch. Use a fine needle and mercerized thread. Hold plastic pieces together with cellophane tape or paper clips rather than pins. Sew corners slightly rounded rather than square.

*Trademark for DuPont's Acrylic fiber. **Trademark for DuPont's Polyester fiber.

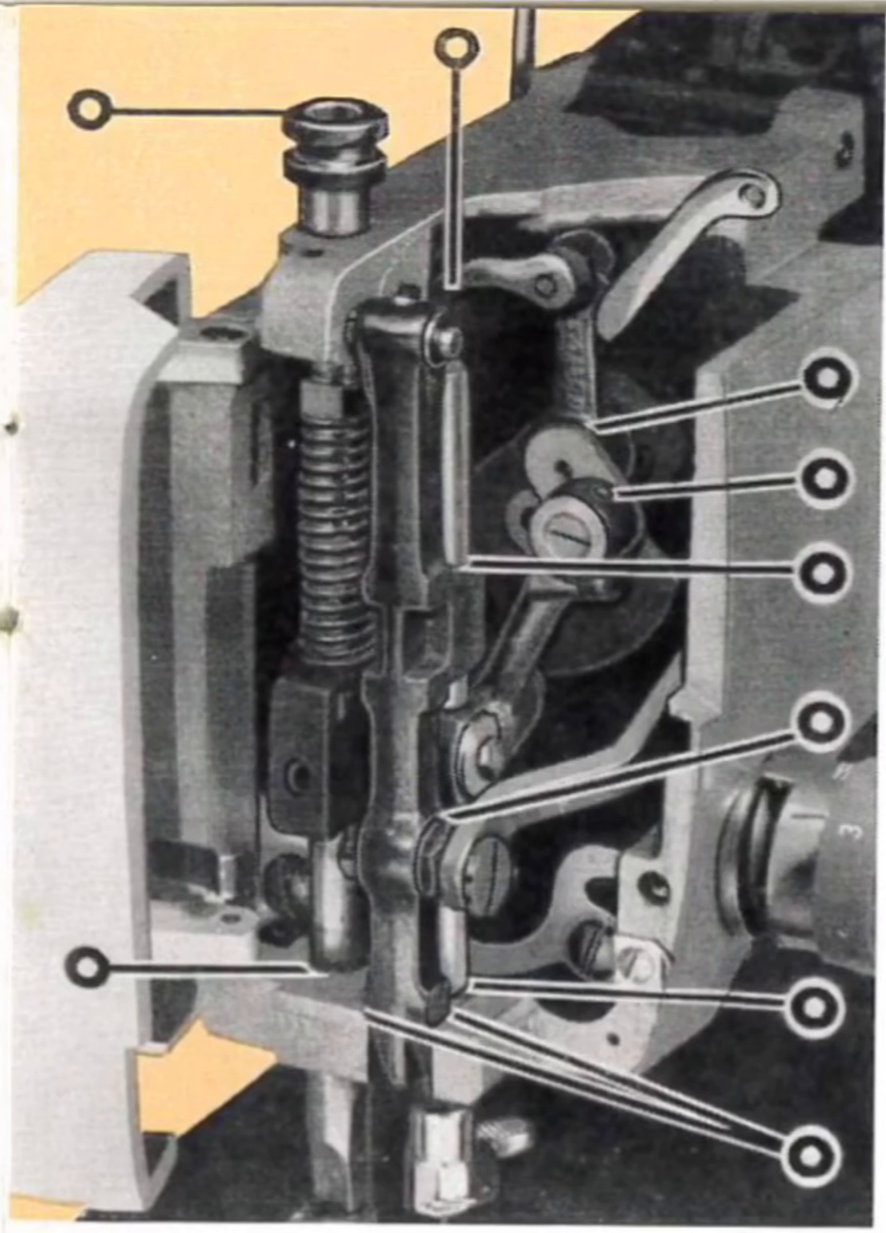


Figure A

Swing hinged face cover plate open to oil points indicated at end of machine head.

Cleaning

AND OILING....

Keep the moving parts free from dust and threads for quiet and efficient operation. Cleaning should be done with a small brush; never with a sharp or pointed tool.

When machine runs hard or makes excessive noise, place a drop of KENMORE sewing machine oil at the points indicated in figs. a, b, c.

(This is particularly important when your machine has not been used for a long time.)

Lift arm coverplate off to oil points indicated at top of machine head.
(Most oiling points are indicated in red.)

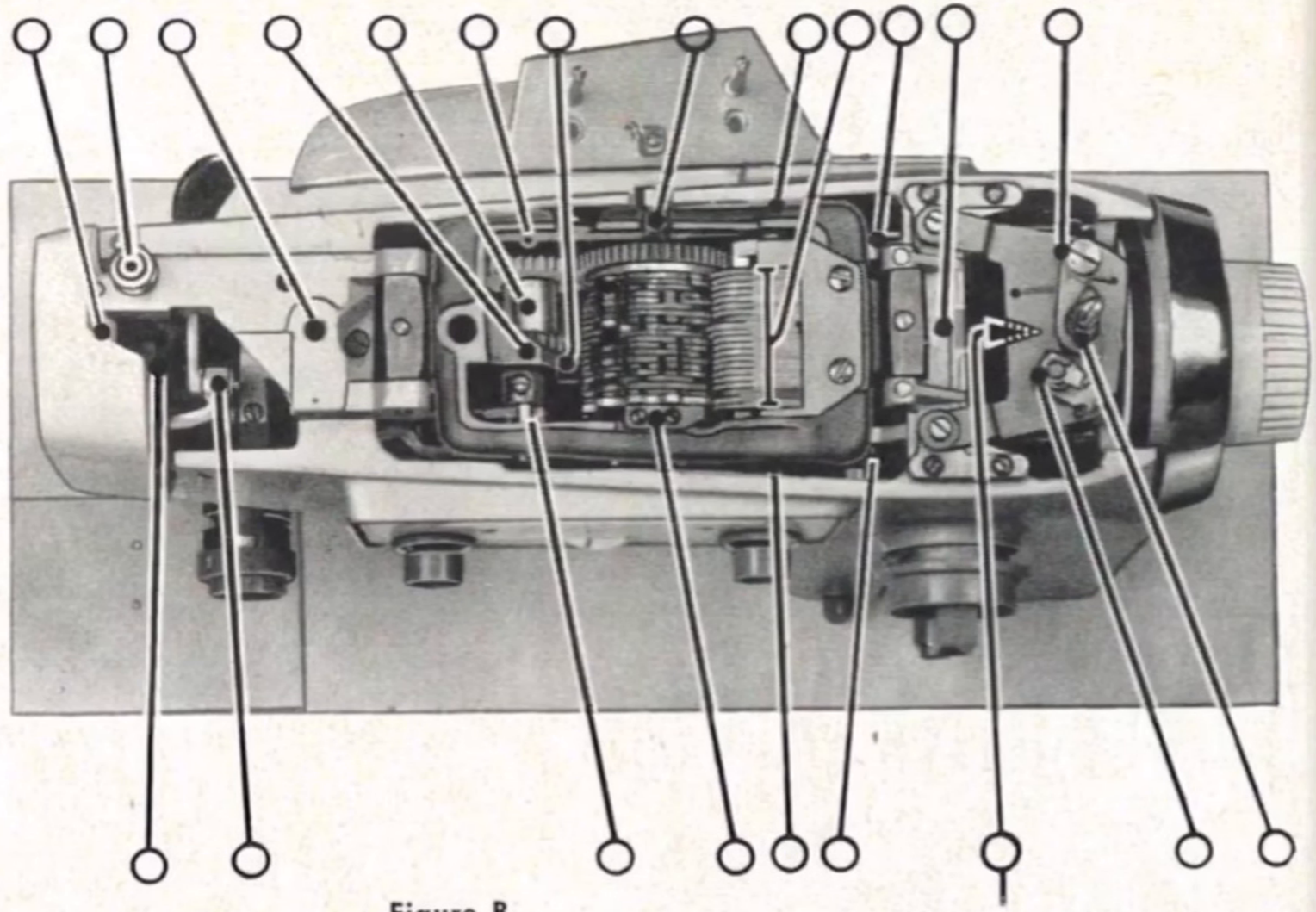
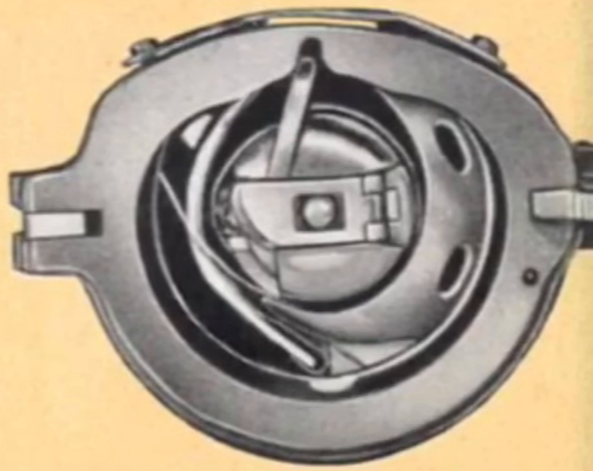


Figure B

Connection Rod Cap and Shaft Bearing
(Underneath Bobbin Winder)

It may be necessary to clean the shuttle area occasionally.

1. Raise the takeup lever to its highest point and remove bobbin case.
2. Press lever to the right side of the shuttle assembly to open the hook race ring. Lift hook out by the center pin.
3. Brush, remove lint and threads from shuttle race.
4. Put a drop of oil on center pin, on back of shuttle and on front of shuttle race.



I—Shuttle Assembly

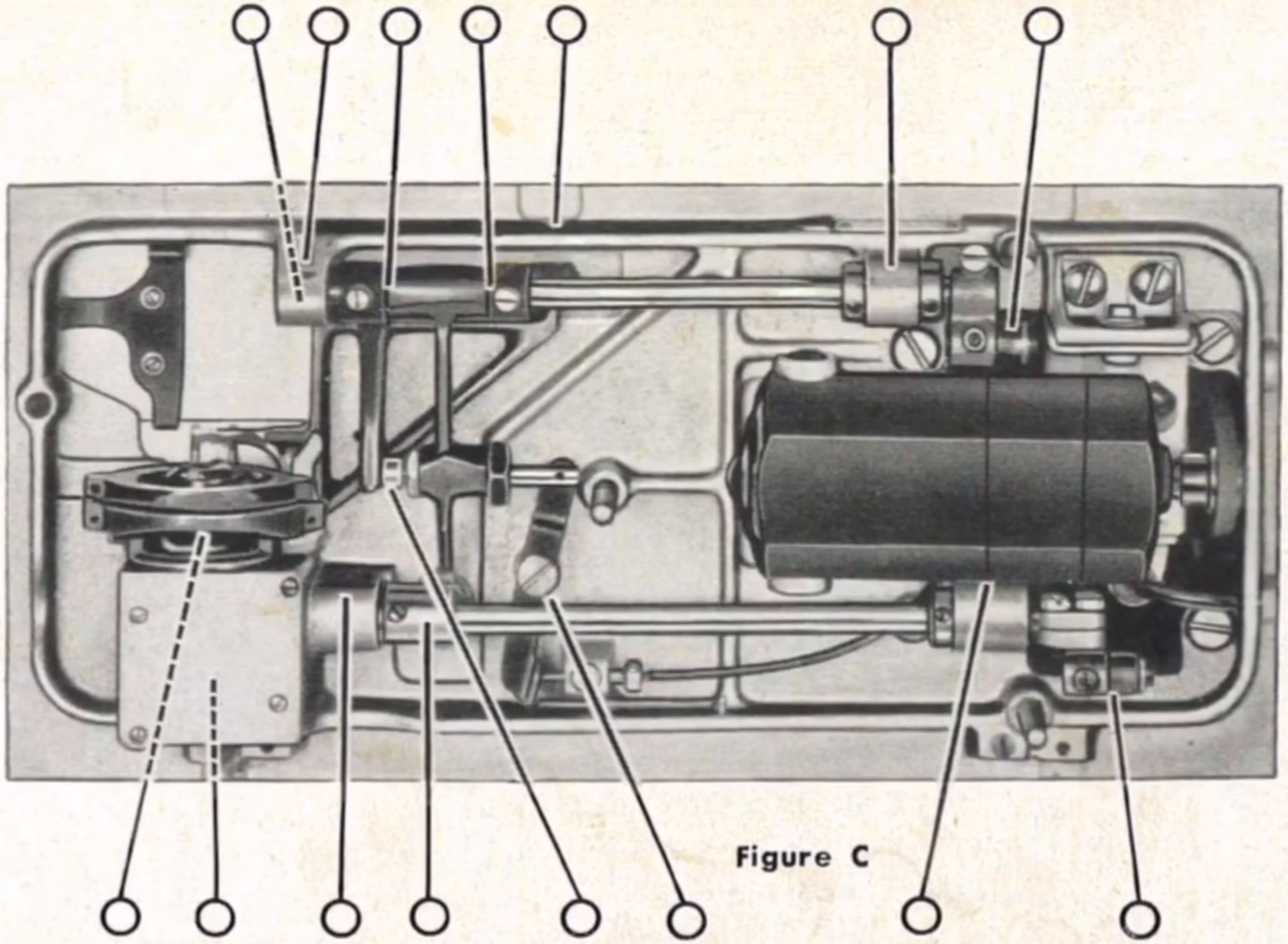


Figure C

Tilt machine head back to oil points indicated on under side of machine head.

NOTE: Dotted lines indicate oil holes are located on top of bedplate.

J—Hook

K— Bobbin Case

L—Hook Race

To re-assemble, hold hook by center pin and fit carefully into assembly opposite the hook driver. Close it by a light pressure on the hook race ring until it snaps into position.

Occasionally remove the needle plate and clean feed dog with a soft brush.

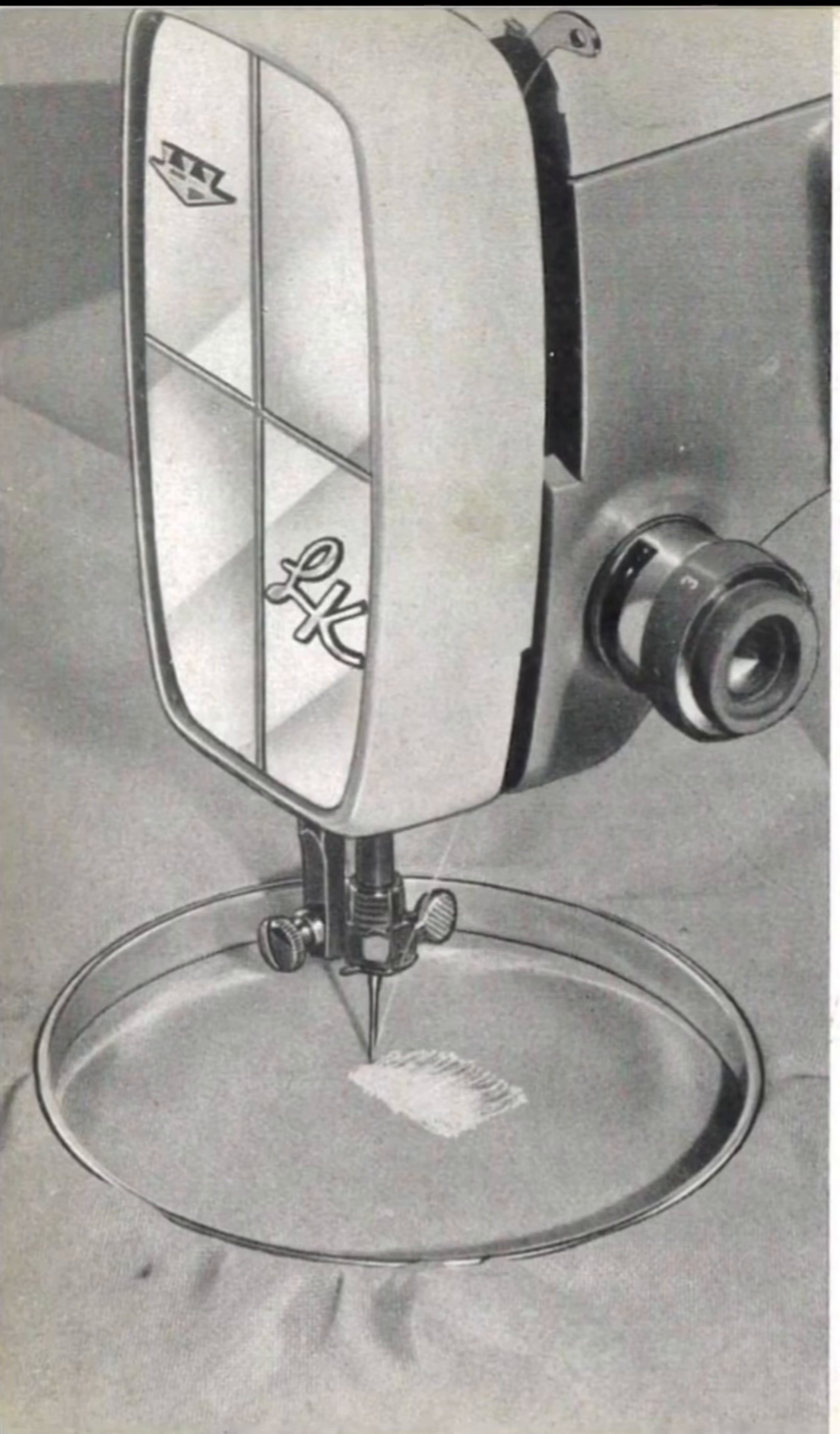
What

PROBLEM	PROBABLE CAUSE	CORRECTION
Irregular Stitches	Incorrect size needle.	Choose correct size needle for thread and fabric (page 7).
	Improper threading.	Rethread machine (page 8 and page 10).
	Loose upper thread tension.	Tighten upper thread tension (page 16).
	Pulling fabric.	Do not pull fabric; guide it gently.
	Light pressure on presser foot.	Increase pressure on presser foot (page 15).
	Loose presser foot.	Reset presser foot (page 15).
	Unevenly wound bobbin.	Rewind bobbin (page 9).
Breaking Needles	Pulling fabric.	Do not pull fabric; guide it gently.
	Incorrect size needle.	Choose correct size needle for thread and fabric (page 7).
	Incorrect setting of needle.	Reset needle (page 6).
	Loose presser foot.	Reset presser foot (page 15).
	Incorrect needle position (with double needle only).	Reset needle position to center (page 6).
	Too wide stitch width. (with double needle only).	Check needle drop
Bunching of Thread	Upper and lower threads not drawn back under presser foot.	Draw both threads back under presser foot (page 12).
	Feed dog down.	Raise feed dog (page 15).
Puckering	Incorrect thread tension(s).	Reset thread tension(s) (page 16 and page 17).
	Light pressure on presser foot.	Increase pressure on presser foot (page 15).
	Using two different sizes or kinds of thread.	Upper thread and bobbin thread should be same size and kind. If they differ in size, use thinner thread in bobbin.
	Bent or blunt needle.	Insert new needle (page 6).
	Loose presser foot.	Reset presser foot (page 15).
	Fabric too sheer or too soft.	Use underlay of tissue paper or tarleton when stitching.

to Do

PROBLEM	PROBABLE CAUSE	CORRECTION
Skipping Stitches	Incorrect size needle.	Choose correct size needle for thread and fabric. (See page 7).
	Bent or blunt needle.	Insert new needle (page 6).
	Incorrect setting of needle.	Reset needle (page 6).
	Tight upper thread tension.	Loosen upper thread tension (page 16).
	Light pressure on presser foot.	Increase pressure on presser foot (page 15).
Breaking Upper Thread	Starting with take-up lever in low position.	Take-up lever must be in highest position when starting to sew.
	Starting to stitch too fast.	Start to stitch at a medium speed.
	Improper threading.	Rethread machine (page 8 and page 10).
	Tight upper thread tension.	Loosen upper thread tension (page 16).
	Incorrect size needle.	Choose correct size needle for thread and fabric (page 7).
	Sharp eye in needle.	Insert new needle (page 6).
	Wide stitch width setting (when picking up bobbin thread only).	Set stitch width regulator at 0 when picking up bobbin thread (page 12).
Breaking Bobbin Thread	Improper bobbin case threading.	Check bobbin case threading (page 8).
	Tight bobbin thread tension.	Loosen bobbin thread tension (page 16).
	Lint in bobbin case or shuttle.	Clean bobbin case and shuttle (pages 20-21).
Fabric not Moving	Feed dog down.	Reset control to "1" (page 15).
	Light pressure on presser foot.	Increase pressure on presser foot (page 15).
	Threads knotted under fabric.	Place both threads back under presser foot before beginning to stitch.
Machine Jamming	Thread caught in shuttle.	Disassemble and clean shuttle (pages 20-21).

Note: See summary of proper control settings for straight or zigzag stitching—page 11.



Mending

DARNING

Stitch width 0
Needle position Center
Feed Dog in Down Position

WITH PRESSER FOOT:

Press down outer ring of pressure foot release, see page 15). With release in this position mending, darning, monogram work, etc. may be done.

Stretch fabric tightly between two spring embroidery hoops and place under needle.

Lower presser bar so thread will have some tension. When you start to darn, move fabric back and forth to cover darning area. Then turn fabric and continue sewing at right-angles to the previous stitching. Always use medium machine speed. You can make any length stitches desired. Slow movement of fabric will make short darning stitches. Fast movement will make long stitches.

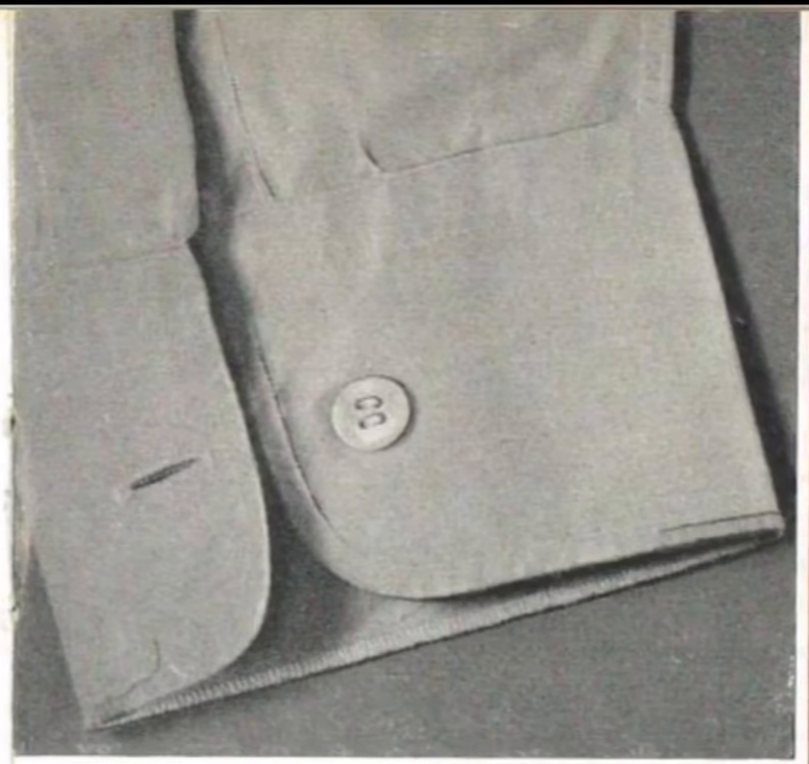
When you finish darning, raise presser foot and remove fabric. Increase pressure for general sewing by pressing center pin of presser foot release.

WITHOUT PRESSER FOOT:

Press down outer ring of pressure foot release.
Remove presser foot.

Proceed as directed under steps 2 and 3 above.

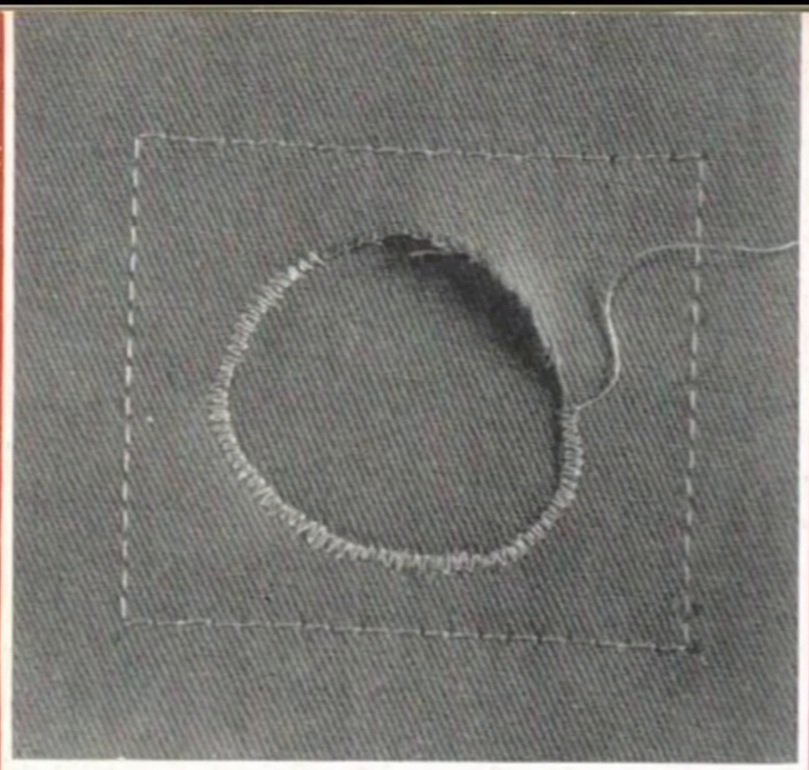
When you finish darning, raise the presser bar and remove fabric. Replace presser foot.



OVERCASTING WORN EDGES

Standard foot	
Stitch width	3 or 4
Stitch length	½
Needle position	Center

Zigzag stitch along the worn edge, catching the fabric as the needle swings to the left, and allowing the needle to just pass over the edge of the fabric on the right.

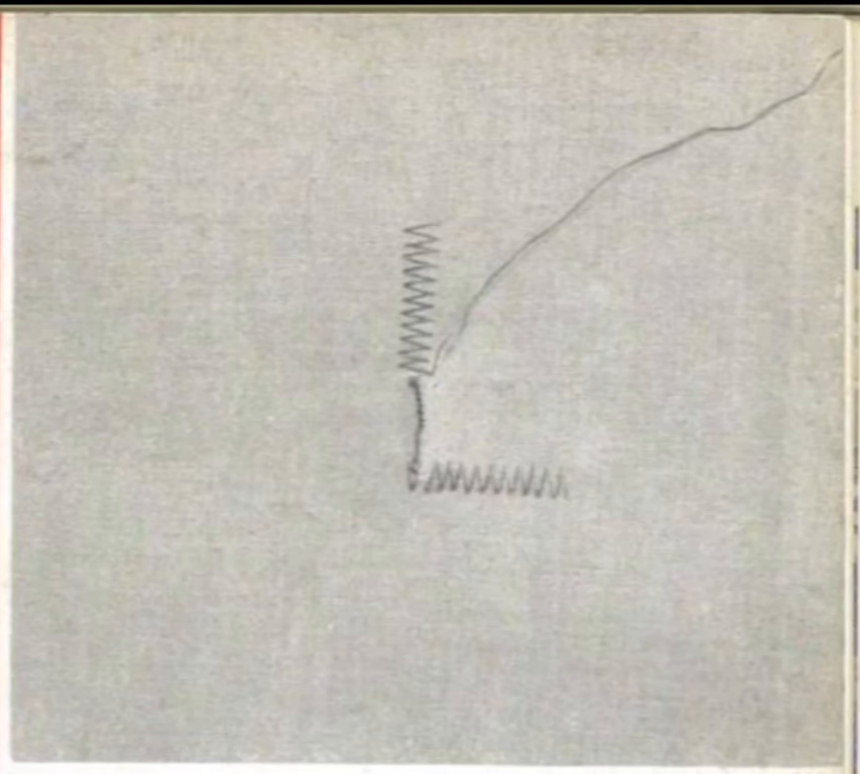


PATCHING

Machine baste patch into place under hole or worn area.

Standard foot	
Stitch width	3
Stitch length	½
Needle position	Center

Zigzag stitch the patch into place around edge of hole or worn area. Trim raw edges close to zigzag stitching.

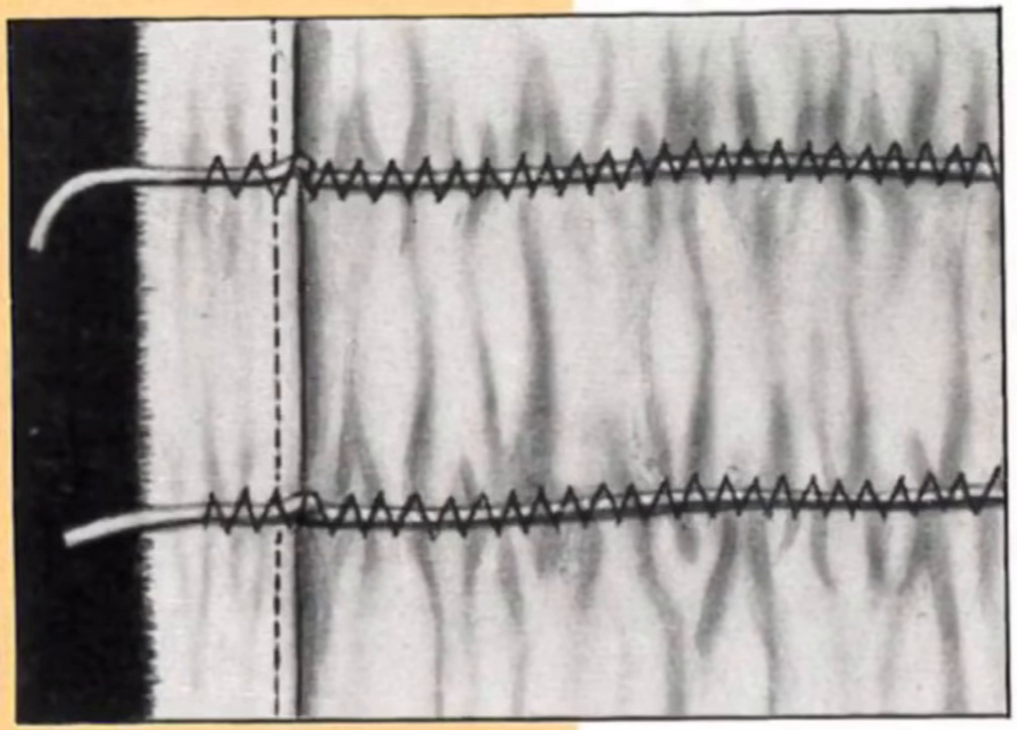


STRAIGHT OR THREE-CORNERED TEAR

Standard foot	
Stitch width	3 or 4
Stitch length	½ to ¾
Needle position	Center

Zigzag stitch along a straight tear, catching fabric on left side of tear on left swing of needle, and fabric on right side of tear on right swing of needle.
In mending a three-cornered tear, zigzag stitch from each end to the center.

Sewing Elastic



SHIRRING WITH ELASTIC THREAD

Applique foot	
Stitch width	2
Stitch length	1
Needle position	Center

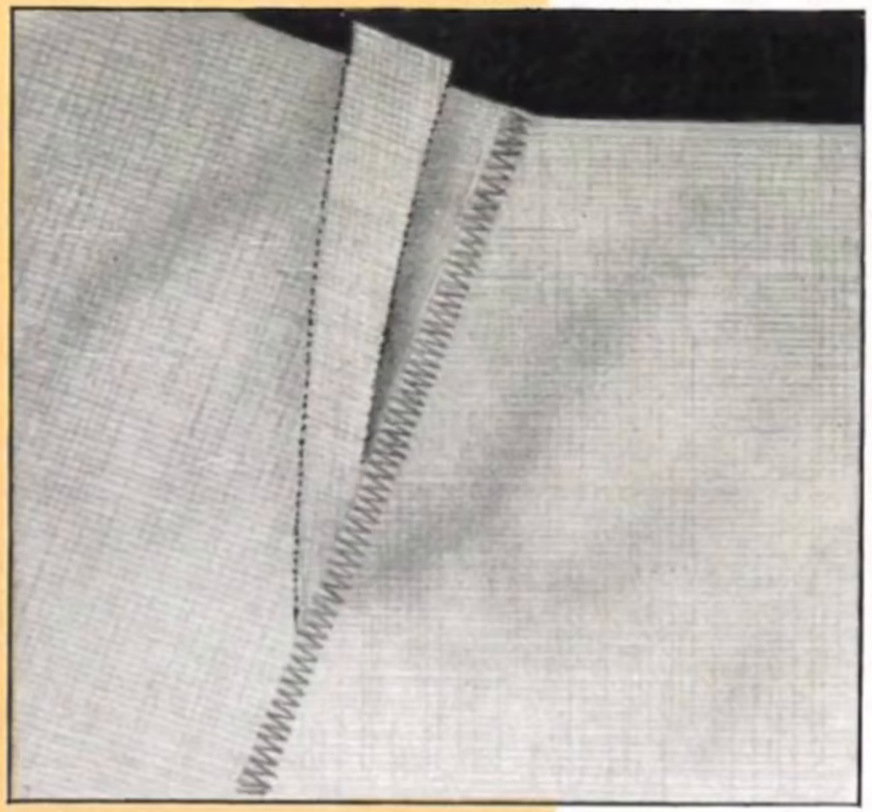
Draw elastic thread through small hole in center of foot. Zigzag stitch over elastic. Adjust fullness by pulling edge of elastic. To fasten elastic thread, straight stitch a small tuck across each end, on the wrong side.

LINGERIE ELASTIC

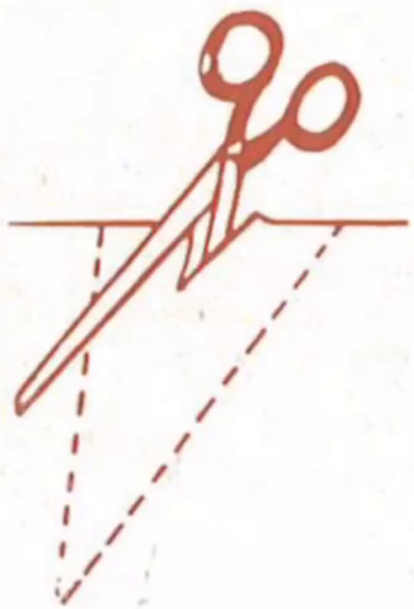
Standard foot	
Stitch width	2 to 3
Stitch length	1
Needle position	Center

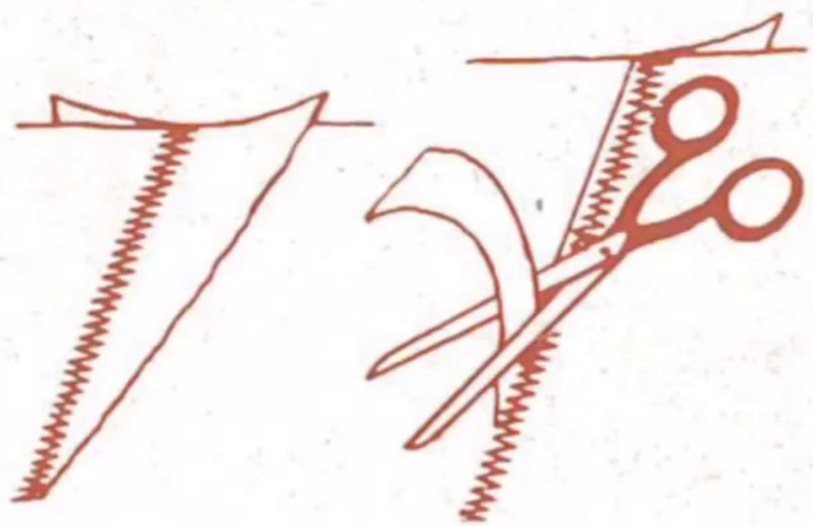
Stretch elastic while zigzag stitching to fabric.

Shaping Darts In Interfacings



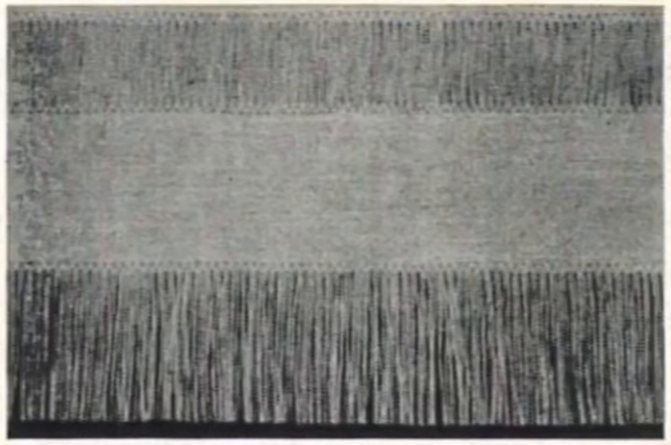
Standard foot	
Stitch width	3
Stitch length	½
Needle position	Center





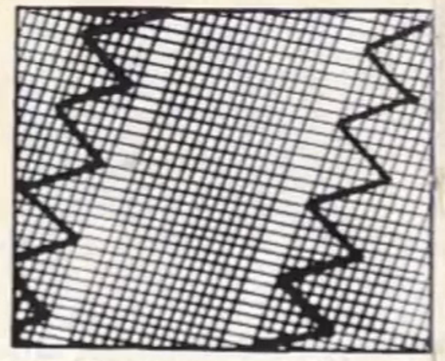
Cut interfacing down center between dart lines. Overlap cut edges, matching dart lines. Zigzag stitch along marking line from point to wide end of dart. Trim both raw edges close to stitching.

Hemstitching



Standard foot
Stitch width 2-3
Stitch length 1-1½
Needle position Left

Draw two threads from fabric, on each side of desired depth of hemstitching. Zigzag stitch along drawn thread line so needle enters fabric on one side of Zigzag stitch and drawn thread line on the other. When one edge of the hemstitching is sewn, turn fabric and stitch second side similarly. Match lines of stitching, as illustrated. Draw threads between the two rows of stitching to complete the hemstitching.



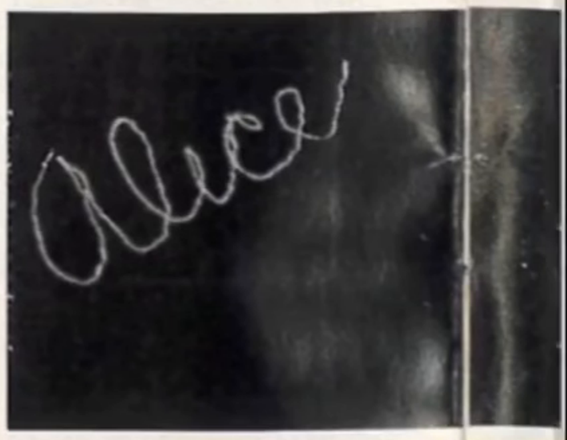
Fringe

Set machine controls as for hemstitching.

Decide on fringe length and draw one thread that distance from the raw edge of the fabric. Lower needle and stitch along the drawn thread line, as for hemstitching. Unravel all threads from the raw edge to the line stitching.

Writing and

FREE HAND



Stitch width 0 to 4
Feed Dog in Down Position

Draw initials or words to be sewn, on fabric and fit fabric into embroidery hoops. *Writing* is done with either zigzag or straight stitching.
Remove presser foot. Set stitch width for straight or zigzag stitches, as desired. Slip hoop and fabric under the needle, lower presser bar and take one stitch to raise bobbin thread through fabric. Using a medium speed, stitch along marked outline, guiding fabric carefully by hand.

Applique

Baste cut-out applique to fabric.

Applique foot	
Stitch width	2 to 4
Stitch length	Near 0
Needle position	Center

Zigzag stitch around applique, completely covering the raw edge.

Monograming

BLOCK STYLE

Satin Stitch Foot	
Stitch width	2 to 4
Stitch length near	0
Pattern selector zigzag	1 or 2

Mark letters or monogram on fabric and place in embroidery hoops. Monograming is done with either a satin stitch or automatic decorative stitch.

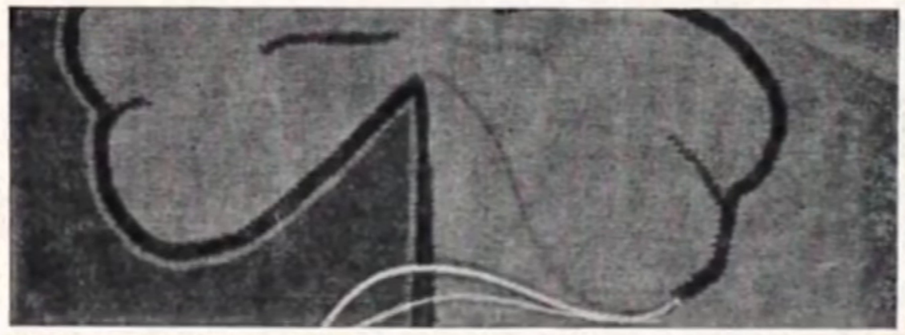
Slip hoop and fabric under needle and attach Satin stitch presser foot. Lower presser foot and take one stitch to raise bobbin thread. Using a medium speed, stitch along blocked outline.

Applique WITH A FILLER THREAD

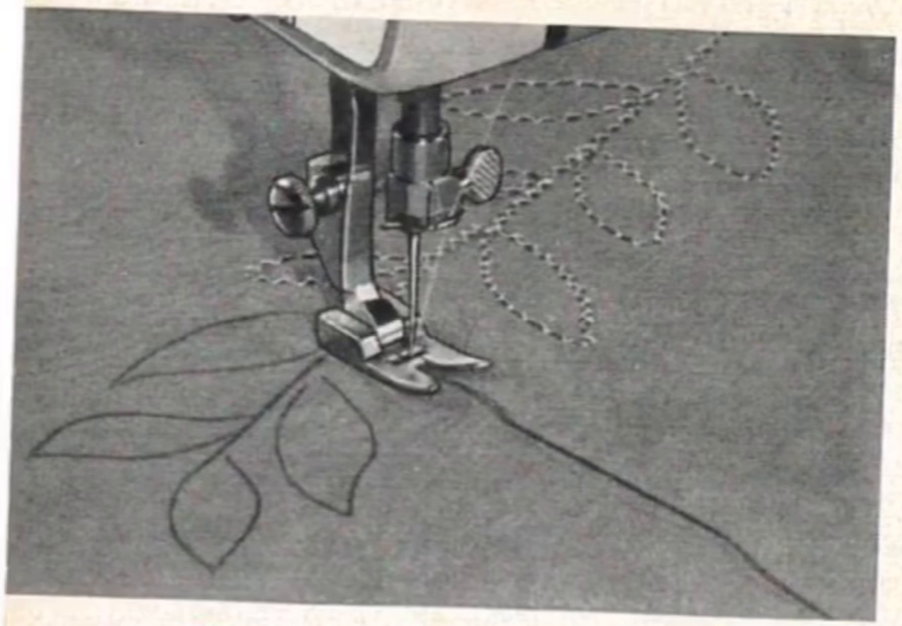
Baste applique material to fabric.

Set machine controls as for plain applique.

Feed filler thread from front to back into hole in applique foot before attaching foot to the machine. Pull filler thread back under foot. Stitch as for plain applique, allowing filler thread to slide through your fingers.



Braiding



YARN AND CORD

Applique foot	
Stitch width	2 to 4
Stitch length	1½ to 4
Needle position	Center

Mark pattern on right side of fabric. Thread pearl cotton thread or light weight yarn into hole in presser foot. Heavy yarn or cord must be placed directly under the presser foot. Set zigzag stitch width so needle enters fabric on each side of the decorative thread. Zigzag stitch along marked pattern.

Rick-Rack

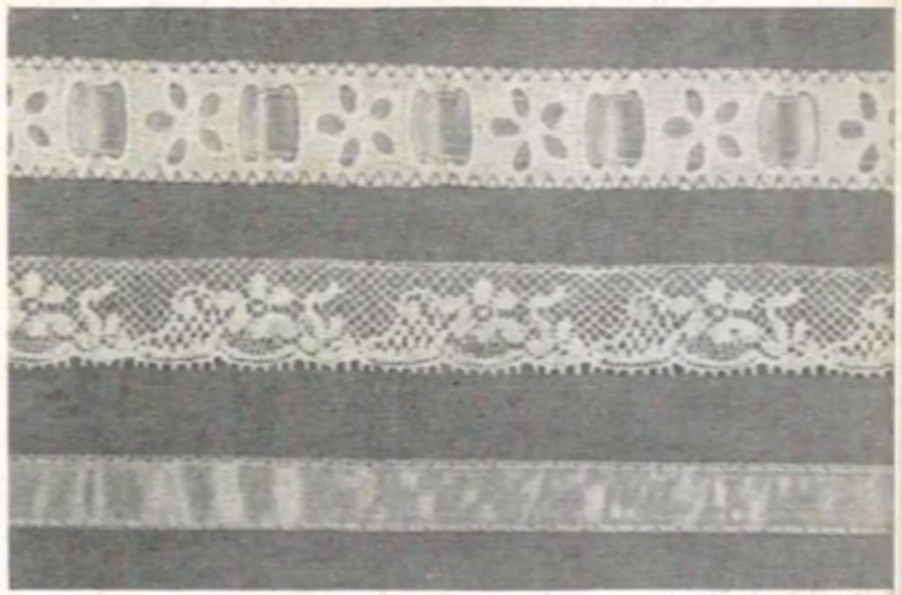
Standard foot	
Needle position	Center

Place rick-rack on fabric under center of presser foot.

To follow: Lower needle into a scallop. Turn hand wheel manually and adjust stitch width and length until needle enters opposite scallop. Zigzag stitch entire length of rick-rack.

To enclose: Lower needle into fabric between two scallops. Adjust as above until needle enters fabric between opposite scallops. Needle should not pierce rick-rack.

Decorative Overlay



Satin stitch foot
Needle position center

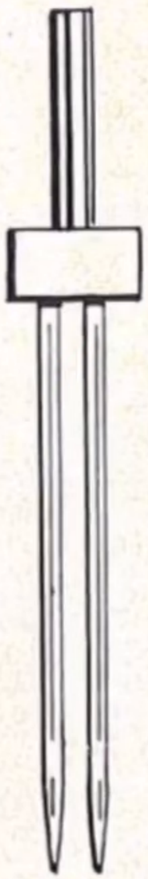
Mark position for decorative overlay on garment. Place overlay in position and zigzag stitch each side.
Adjust stitch width and length as needed.

Shell Stitch Edging

Needle Position **Left**

This decorative edge treatment may be done on most soft fabrics. Set machine for a plain zigzag stitch, and tighten both thread tensions. Sew along folded edge.

Double Needle SATIN STITCH FOOT OR STANDARD FOOT



Setting the Double Needle

Needle position	**Center**
Stitch width control	**0 to 2**

Raise the take-up lever to its highest point and loosen needle clamp screw. Hold double needle assembly with full length needle grooves toward you. Slip assembly all the way into needle clamp and tighten screw.

THREADING THE DOUBLE NEEDLE

Place a spool of thread on each spool pin. Draw the threads together and thread machine as you would for single needle sewing. Pass one thread on either side of the center tension disc of the upper tension mechanism. Draw one thread through each needle from front to back and pull several inches of thread through. Thread bobbin and pick up bobbin thread as for single needle sewing.

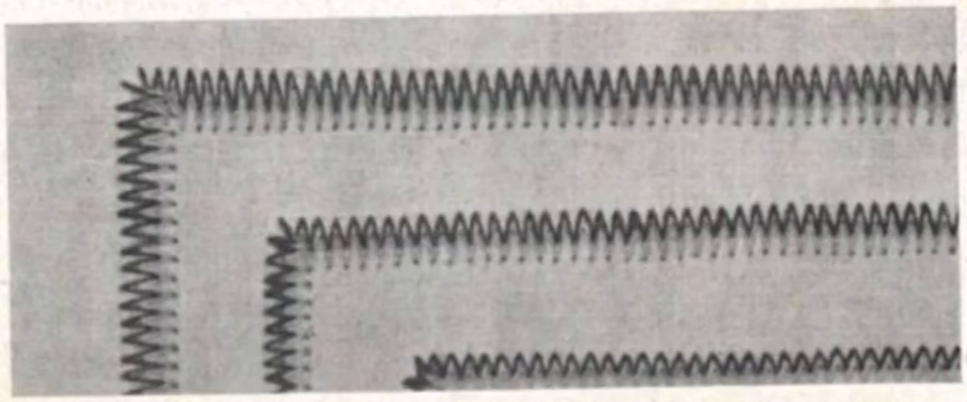
THREAD SELECTION

Use only mercerized machine embroidery thread or mercerized sewing thread size 50 and finer. Machine embroidery thread is recommended for both upper and lower threading.

Stitching

Set needle position on *center* and all other controls as for single needle stitching.

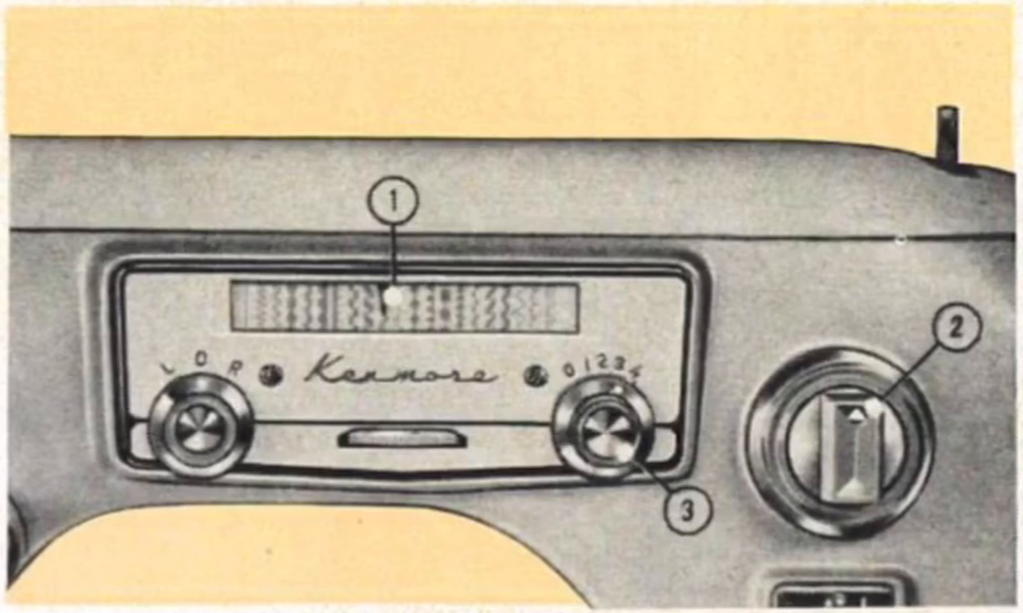
Most original decorative patterns and all automatic pattern stitches are possible with the double needle. Before starting any stitching operation, check needle drop by turning the hand wheel manually. With needle position control on *center,* needle should enter the fabric without touching the presser foot.



TURNING A CORNER

To turn a square corner in double needle stitching, stop stitching with the needle tips just piercing the fabric. Raise the presser foot, shift fabric half the turn, lower presser foot and take one stitch. Raise the presser foot again, complete the turn, and begin stitching in the new direction.

Automatic Decorative Stitching



Push pattern selector in and turn to left or right until arrow is on desired pattern shown on stitch pattern indicator plate. Pull pattern selector out to engage mechanism.

When using pattern shown on indicator plate in pearl gray color red arrow on cam feed control should be in down position.

When using pattern shown in red on stitch indicator plate red arrow on cam feed control should be in up position.

SATIN STITCH

Satin stitch foot	
Stitch width	**3 or 4**
Stitch length	**near 0**

The above control settings will give wide stitches placed close together for a solid, satin appearance.

DECORATIVE THREAD WITH ZIGZAG STITCH

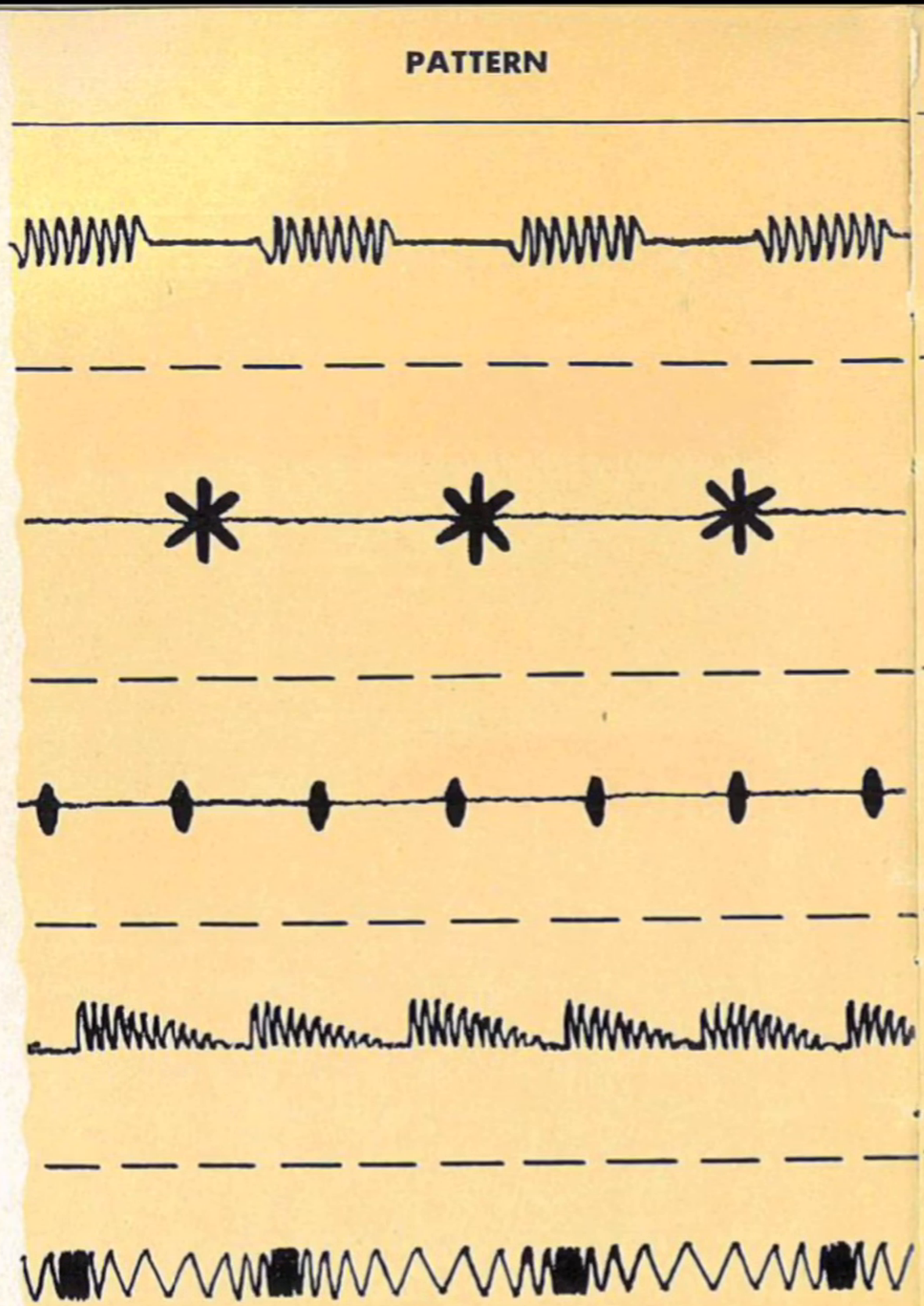
Standard foot	
Stitch width	**2 to 4**
Stitch length	**1 to 2**

Wind bobbin carefully with decorative thread, such as pearl cotton or metallic threads. Loosen bobbin thread tension and tighten upper thread tension (p. 16). Set controls as indicated above and test stitch on fabric sample. Adjust tensions until satisfactory stitch is obtained. Place fabric under presser foot with wrong side up.

Original Decorative Stitching

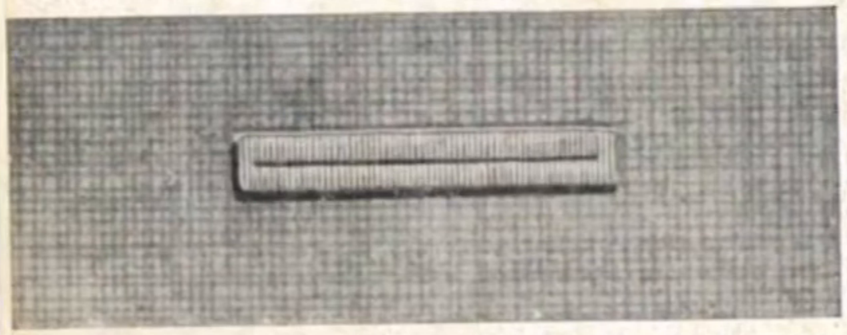
Satin Stitch foot
Pattern selector zigzag position

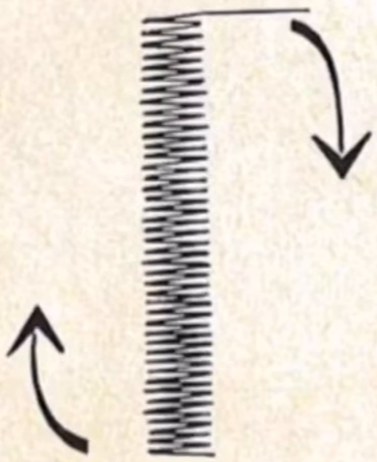
Many original decorative stitches are possible with slight variation in stitch width, stitch length, needle position, and feed dog position. A few patterns are illustrated and explained here. There are many more possibilities which you will discover as you use your machine.



STITCH WIDTH	STITCH LENGTH	NEEDLE POSITION	PROCEDURE
0 for straight 4 for zigzag	Near 0	Center	Alternate straight stitching with zigzag stitching by moving stitch width control quickly back and forth between 0 and 4. Repeat rhythmically.
0 for straight 4 for flower	1½	Right or Left	Straight stitch desired distance. For flower, drop feed, change stitch width, and take 2 zigzag stitches in position. Pivot fabric for each petal. When flower is completed turn to straight stitch position. Reset controls and repeat.
0 for straight 4 for knot	1½	Center	Follow straight stitching with a knot. Drop feed, change stitch width, and take 3 or 4 zigzag stitches. Repeat.
Between 0 & 4	Near 0	Right or Left	Start with stitch width 4. Decrease stitch width to 0, flip control quickly back to 4, and repeat rhythmically.
4	Between near 0 and 2	Center	Set stitch length lock at 2. Move stitch length control rhythmically back and forth between near 0 and 2.

Buttons AND Buttonholes





PLAIN BUTTONHOLES

Buttonhole foot	
Stitch length	**Near 0**
Needle position	**Left**

It is recommended that tailor's chalk be used to determine length of buttonhole beforehand.

1 Move stitch width indicator to stop at 2. Zig zag stitch first side of buttonhole. When stitching reaches the end of buttonhole, stop the machine with needle in fabric on right side of the line of stitching.

2 Turn fabric to right until it is positioned for second half of buttonhole.

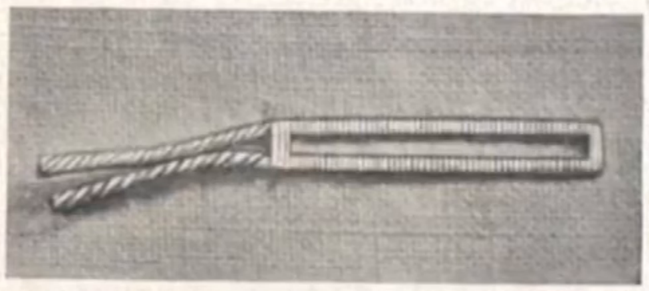
3 Turn the handwheel and take one stitch to the left. Move stitch width indicator to 4, feed dog control to down and take a few stitches to bartack end of buttonhole. Stop with needle in fabric on the left.

4 Move stitch width indicator back to stop at 2, feed dog control up, and stitch to end of buttonhole. Stop machine with needle in fabric on the left.

5 Move the stitch width indicator to 4, feed dog control down and take a few stitches to bartack end of buttonhole. Stop with needle on the left. Then move stitch width to 0 and take a few stitches to tie ends of threads.

CORDED BUTTONHOLES

Pull a length of heavy thread or light weight cord through the small hole in the buttonhole foot. Follow directions for plain buttonholes. When sewing the buttonhole, let the filler thread slide through your hand.



BUTTONS

Button foot	
Needle position	Left
Feed dog position	Down

1 Place needle into left hole of button, and lower presser foot.

2 Set stitch width indicator at width between holes of button. Test width by turning handwheel slowly. Take several zigzag stitches to sew on button, ending with needle on left side.

3 Set stitch width indicator at 0. Take a few stitches in left hole of button to lock threads. Pull threads to wrong side.

NOTE: To make a small thread shank when sewing on a flat button, place a straight pin or needle between the holes of the button.

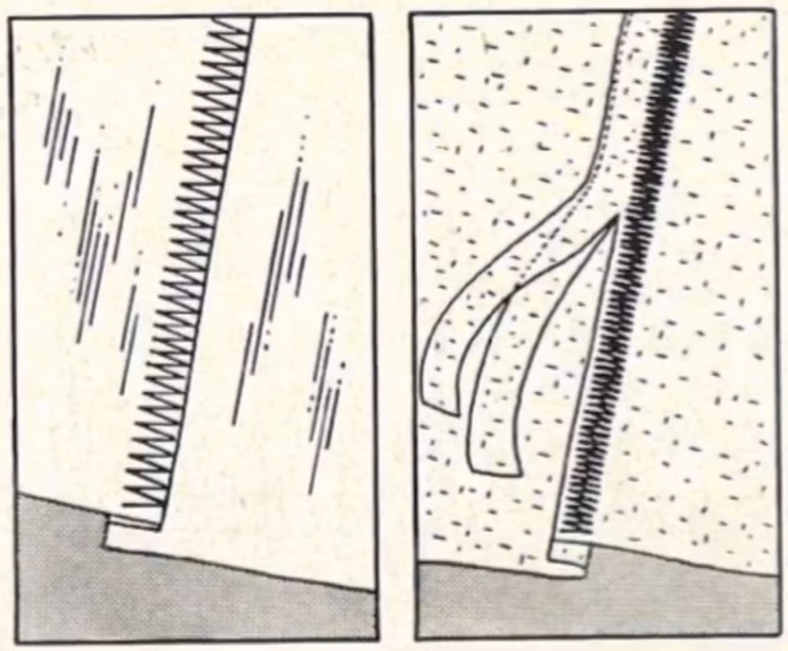
Special Purpose Seams

LINGERIE SEAM

Machine baste seam and press both seam allowances to one side.

Standard foot	
Stitch width	2 to 3
Stitch length	¾
Needle position	Left

Turn the garment to the right side and zigzag stitch along the seam, allowing one side of the stitching to fall on the seam, the other on the seam thickness. Remove basting stitch.



CORDING SEAM FOR SHEERS AND TRICOT

Satin stitch foot	
Stitch width	2 to 3
Stitch length	Near 0
Needle position	Center

Zigzag stitch entire seam. Trim seam allowance close to stitching.

INVISIBLE SEAM FOR LACES AND EMBROIDERED FABRICS

Baste one piece of lace over the other, matching design.

Satin stitch foot	
Stitch width	2
Stitch length	¾
Needle position	Left

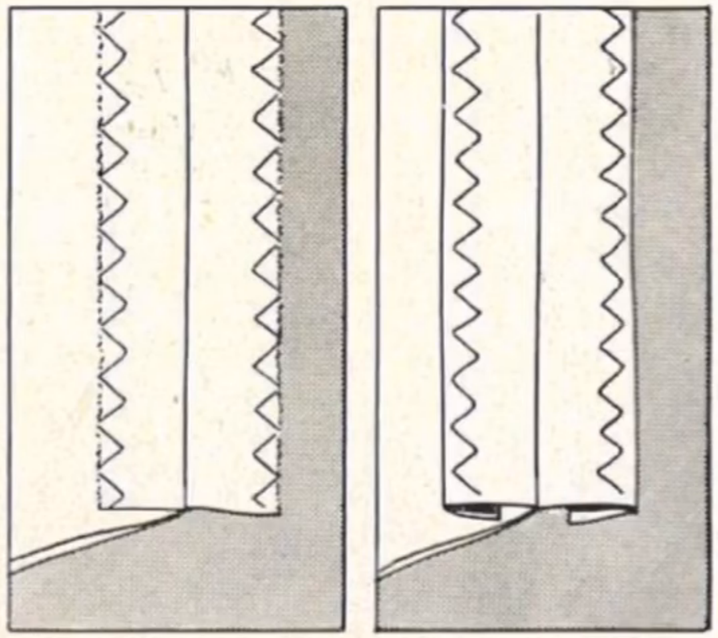
Zigzag stitch, following outline of the design. Trim both seam allowances close to stitching.

Seam Finishes

OVERCAST

Standard foot
Stitch width 2 to 3
Stitch length 1 to 2
Needle position Center

Zigzag stitch along raw edge of each seam allowance to eliminate raveling.



TURNED AND STITCHED

Set machine as for overcast seam finish.

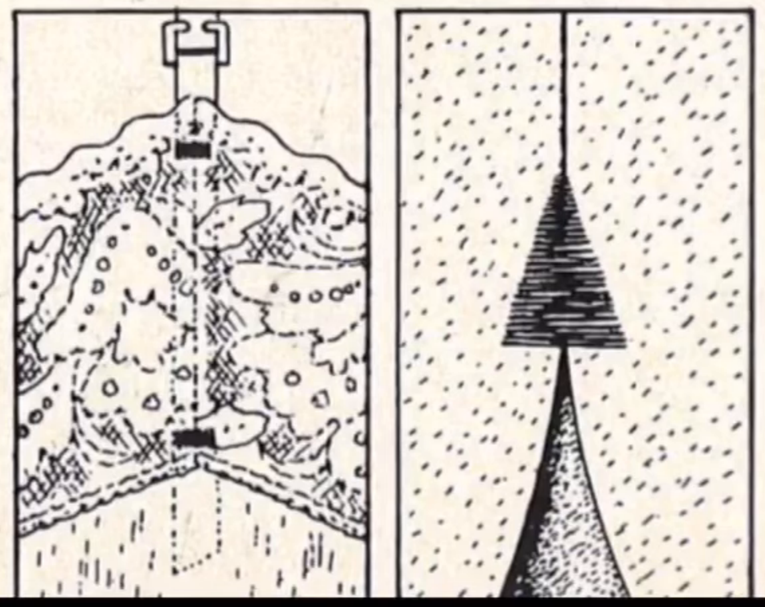
Fold raw edge of seam allowance toward garment. Zigzag stitch along fold, allowing needle to pierce exact edge of fold.

REINFORCEMENTS

BARTACK POINTS OF STRAIN

Satin stitch foot
Stitch width 2 to 3
Stitch length Near 0
Needle position Center

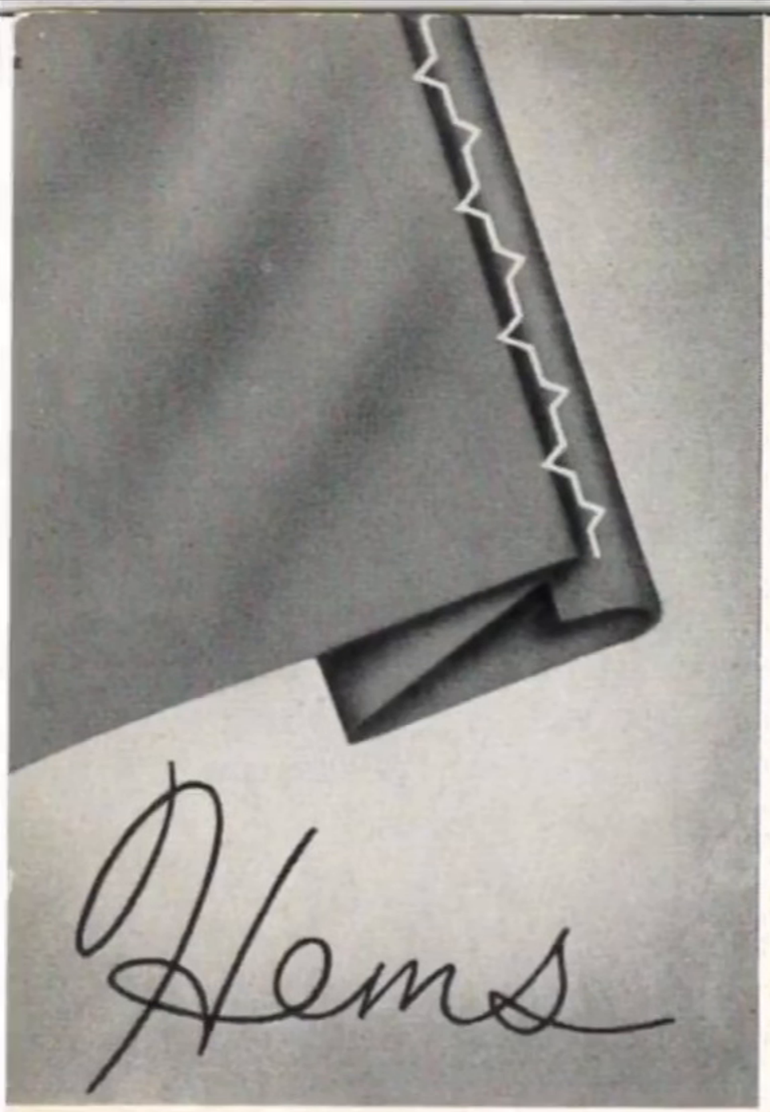
Zigzag stitch bartack to length desired.



ORNAMENTAL TACK FOR POINTS OF STRAIN

Satin stitch foot
Stitch length Near 0
Needle position Center

Start at widest point of arrowhead tack. Move the stitch width regulator slowly from 4 to 0.

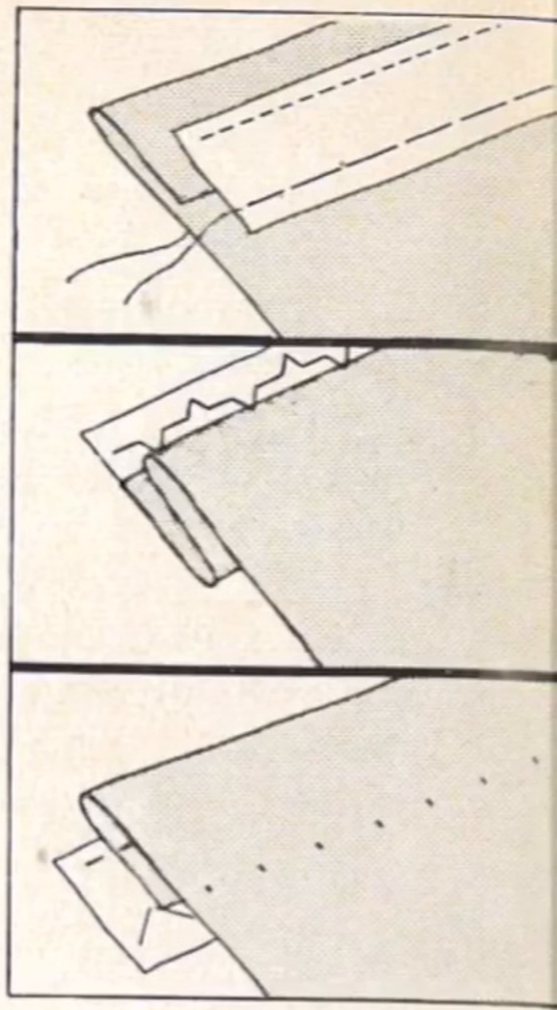


SETTING THE MACHINE

Set the pointer to the decorative stitch (11th from left on indicator plate) for blind hemming and adjust the right control lever to suit the material to be sewn (i. e. between 1 and 1½). Set the stitch length lever between 1 and 2. Use normal thread tension.
Attach the blind stitch guide as follow:

1 Drop presser foot lever.

2 Loosen presser foot screw — slide on guide from front to back between the presser foot and the presser foot screw so that guide edge covers the left half of the presser foot and almost touches bedplate. Tighten presser foot screw. When using this blindstitch guide, the stitches will be visible on one side of the fabric only.



Blindstitch Guide

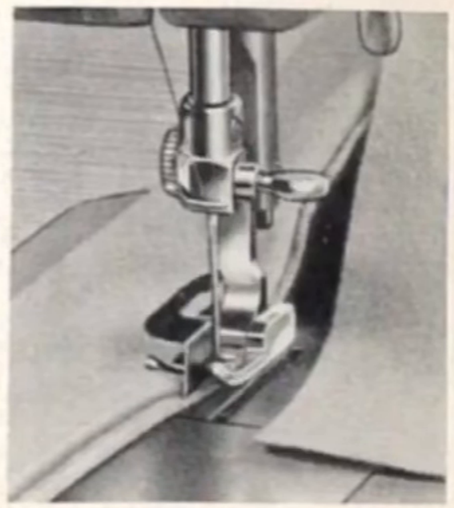
METHOD OF WORKING:

1 When working with lightweight material, fold the raw edges approx. 3/16" over to the left side. With heavier goods, such as jersey or woolen goods generally, the raw edge should only be overcast or stayed. (See page 39 . . . „Overcasting".)

2 Fold the desired width of the hem to the left.

3 Next, fold almost the full width of the hem over to the right allowing the hem to project 3/16" for blindstitching.

4 Raise the presser foot and place the work under the needle with the short projecting edge of the fabric to the right of the needle. Lower the presser foot and start to sew. When deflecting to the left, the needle must sew accurately along the edge of the fold.



Tips with Attachments

Follow these hints for a good start with your attachments:

1 The take-up lever must always be at its highest point when you start to sew, and before you remove fabric or an attachment.

2 Use a screwdriver to tighten or loosen the presser foot or attachment.

3 Stitch slowly when using any attachment.

4 Practice using the attachment on a scrap of the same fabric you will use for your garment.

5 If your attachment has an enclosed needle hole, you must put the upper thread through this hole before you start to stitch. To do this, lay any piece of material under needle hole of the attachment. Do not lower presser bar lever. Turn handwheel by hand to take one complete stitch, then pull fabric back of presser foot and away from thread.

6 Be sure needle is tight in the needle clamp.

7 If elastic thread or embroidery floss is used, it must be wound on bobbin by hand.

8 Edges of your fabric should be cut with straight shears rather than with pinking shears.

To expand the versatility of your machine and increase your sewing pleasure, these efficient, easy to use attachments are available.

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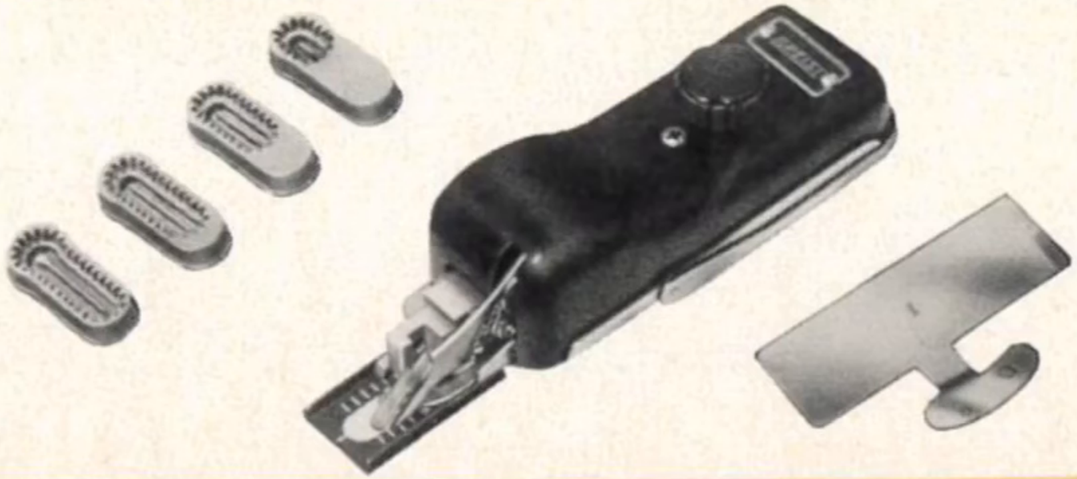
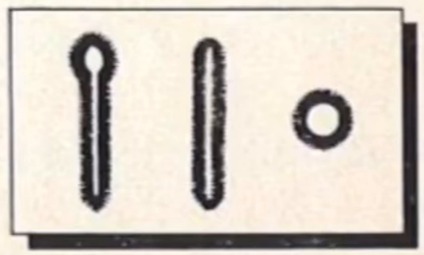
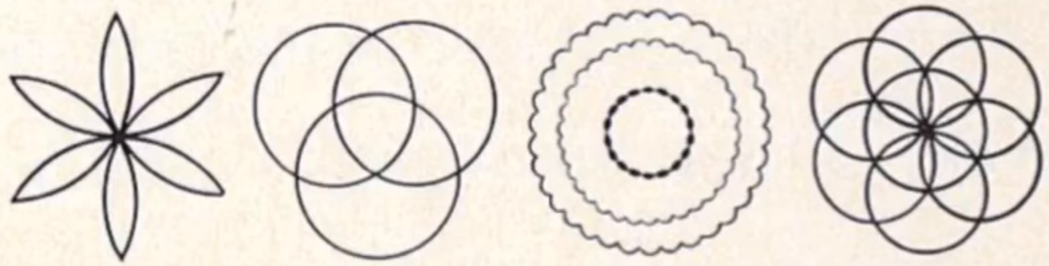




Add extra decorative uses to your Kenmore automatic with this exclusive new attachment. Stitches even circles automatically. Makes an easy job of scallops, fancy designs.



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